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Oil, Paint and Drug Reporter

The Chemical Market Authority Since 1871

Volume 142 No. 18 — Schnell Publishing Company, Inc., Publishers — November 2, 1942

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Oil, Paint and Drug Reporter

Founded 1871 by William O. Allison

SCHNELL PUBLISHING COMPANY, INC., PUBLISHERS

Volume 142 | November 2, 1942 | No. 18

RECEIVED NOV 2 1942 LIBRARY THE CHEMISTS' CLUB

Salary Limitation Regulations Issued

OPD Washington Bureau

Regulations to limit the salary earnings of all persons to $25,000 after payment of Federal income taxes, were announced October 27 by James F. Byrnes, director of Economic Stabilization. The regulations become effective January 1, but in the meantime there are to be no increases in such salaries without approval of the Treasury Department, which is to enforce the control.

The term salary or salary payments, as defined by the order, means all forms of direct or indirect compensation which is computed on a weekly, monthly, annual or other comparable basis—except a wage basis—for personal services of an employee irrespective of when rendered. This includes bonuses, additional compensation, gifts, loans, commissions, fees, and any other remuneration in any

—Continued on page 75

— OPD : 72d Year —

Overtime Pay Case Rehearing Is Denied

OPD Washington Bureau

A rehearing of the five to four decision earlier this year upholding validity of contracts between A. H. Belo Corporation, publisher of the Dallas News, and its employees under which overtime payments would not be paid until more than fifty-four hours a week had been worked was denied October 26 by the Supreme Court of the United States.

The court also denied a rehearing of its decision in the Overnight Motor Transportation Company case involving similar questions of what constitutes "regular" pay.

Rehearing of the Belo case had been sought by the government on the grounds that the two decisions were inconsistent and that as a result severe complications had resulted in the application of the fair labor standards act to a large number of employees who are working for a weekly salary.

— OPD : 72d Year —

A.P.C. Seizes Jungmann And S.K.S. Dyestuff

Leo T. Crowley, Alien Property Custodian, has announced seizure by his office of control of the following American properties of foreign nationals:—

American Magnesium Metals Corporation, Pittsburgh, Pa., a patent-holding and exploiting company formerly controlled by Austrian Magnesite Company, Ltd.

Jungmann & Co., New York, importers and exporters of industrial and pharmaceutical chemicals.

Schenker & Co. and Draeger Shipping Company, both of New York, freight forwarding firms allied with Shenker & Co., Berlin.

Japan Cotton & Silk Trading Company, Inc., Taiyo Trading Company, Gunze Silk Corporation and Empire Import & Export Company, all of New York, and all Japanese companies dealing princi-

—Continued on page 66

— OPD : 72d Year —

Buffalo Electro-Chem. Debt To German Interest Seized

The Alien Property Custodian has seived certain indebtedness owing by Buffalo Electro-Chemical Company. The property is described as follows:—

All right, title, interest and claim of any name or nature whatsoever of Elektrochemische Werke, Muenchen, Hoellriegelskreuth, Germany, in and to all indebtedness, contingent or otherwise and whether or not matured, owing to it by Buffalo Electro-Chemical Company, including but not limited to all security rights in and to any and all collateral for any or all of such indebtedness and the right to sue for and collect such indebtedness.

OPA Probe Asked By Farm Senators

OPD Washington Bureau

A resolution for an investigation of the administration of the price-control act by the Office of Price Administration was introduced in the senate October 29, by Senator Clyde Reed, of Kansas, and Senator Guy M. Gillette, of Iowa. The resolution was the outgrowth of growing resentment of farm bloc members to Price Administrator Leon Henderson's handling of the farm price problem.

In remarks on the senate floor Senator Reed accused Mr. Henderson of "selling" President Roosevelt a farm subsidy policy without congressional authority "to bring down the price of wheat." He had reference to a directive of the President to calculate government benefit payments as part of crop returns to farmers in fixing ceilings on agricultural prices.

Insecticide Packaging Standards Revised

OPD Washington Bureau

Proposed revision of simplified practice recommendation on R-41-40, dealing with package sizes for agricultural insecticides and fungicides, has been accorded the required degree of acceptance by the industry, and is to become effective November 1, 1942, it was announced by the Division of Simplified Practice of the National Bureau of Standards, October 28.

As originally promulgated in 1926, the recommendation established a simplified schedule of package sizes for certain chemicals. The first revision which became effective 1938, embodied changes in package sizes, and simplified the schedule to include standard packaging for basic lead arsenate. In November, 1939, the manu-

—Continued on page 66

WPB Inventory Committee Report Favors Control Plan

OPD Washington Bureau

Formal regulation of inventories of consumers' goods of wholesalers, retailers and manufacturers will aid in reducing the inflationary effects which naturally flow from scarcities of goods, such as speculative buying, development of "black markets," and the decrease in the normal regulatory forces of competition which results when competitors cannot get merchandise, the special Wholesale and Retail Inventory Policy Committee stated in a report to Joseph L. Weiner, Deputy Director of the Office of Civilian Supply and made public October 26.

The report constituted the basis on which the decision by Donald Nelson, chairman of the War Production Board, to proceed directly to a formal inventory control program, instead of adopting a method of requiring quarterly reports from wholesalers, retailers and manufacturers. This decision was announced October 20 by Mr. Nelson.

In the opinion of the committee an equitable distribution of inventories will help keep in existence thousands of small community stores necessary to supply the needs of suburban and rural communities, especially those in which war plants now are located. In addition, it stated, inventory regulation is desirable in connection with any future rationing programs, in which connection, it was pointed out, such programs can hardly be successful unless the existing supply of the rationed article is distributed among merchants in proportion to the amounts that will be bought by consumers.

Other accomplishments that might be expected as a result of regulation, the report said, would be a reduction in the amount of consumers' goods it is necessary to produce by mobilizing lazy inventories, by diminishing the storage work which must be done, by promoting a more even flow of goods and thus reducing emergency demands for manpower, and by protecting the post-war national economy from the devastating effects of the "large-inventory" psychology which merchandise scarcities inevitably tend to develop.

Drug Stores Stocks Low

An analysis of the report showed that during the course of its studies the committee found the following general conditions of inventories:—

1. In general the inventories of wholesalers and manufacturers are "normal" or below "normal" in relation to sales. This condition has been the re-

—Continued on page 76

— OPD : 72d Year —

A.D.M.A. Appoints Flanagan Counsel

James G. Flanagan, secretary and general counsel for S. B. Penick & Co., this city, has been appointed general counsel for the American Drug

James G. Flanagan

Manufacturers Association. He succeeds Leslie D. Harrop, counsel for the Upjohn Company, Kalamazoo, Mich., who has accepted a commission

—Continued on page 76

American Potash Stock Vested As Alien-Held

OPD Washington Bureau

The Alien Property Custodian Leo Crowley last week announced that he had vested 90.79 percent of the capital stock of the American Potash & Chemical Company, New York, as owned by foreign nationals. Mr. Crowley announced that he also vested an option for the repurchase of 5,000 shares as held by a foreign national. The property vested was described in the announcement by the Alien Property Custodian as follows:—

474,726 shares, which constitute a substantial part, namely 89.84 percent of all outstanding shares, of no par value capital stock of American Potash & Chemical Corporation, a Delaware corporation, New York, New York, which is a business enterprise within the United States, the names of the registered owners of which, and the number of shares owned by them respectively, are as follows:—

Name	Number of shares
Consolidated Gold Fields of South Africa, Ltd.	127,723
Gold Fields American Development Co., Ltd.	201,531
New Consolidated Gold Fields, Ltd.	69,712
Administratickantoor Diligentia	75,760
Total	474,726

all of which shares are held for the benefit of Wintershall, A. G., Germany, and Salzdetfurth, A. G., Germany, and each of them is property of nationals and represents control said business enterprise.

5,000 shares, constituting 0.95 percent of the outstanding shares, of similar stock held in the name of MacNaughton & Co. for the benefit of the estate of August Diehn, a national of Germany.

That certain option held by Hope Syndicate, Amsterdam, Holland, entitling it to repurchase 5,000 shares of stock held by Gold Fields American Development Company, Ltd., which option is held for the benefit of Wintershall, A. G., Germany, and Salzdetfurth, A. G., Germany.

Pen-Chlor Patent Interest of I.G. Vested

OPD Washington Bureau

The Alien Property Custodian has vested all right, title and interest of I. G. Farbenindustrie, A.G., whose last known address was Frankfurt, Germany, in a contract dated March 27, 1931, between I. G. Farbenindustrie, A. G., and Pennsylvania Salt Manufacturing Company, together with all

—Continued on page 66

Cosmetic Makers Warned To Give WPB Data

Toiletries and cosmetic manufacturers last week were warned by the Toilet Goods Association to answer a questionnaire entitled "Report on Production, Shades, Scents, Container Sizes and Sales of Toiletry and Cosmetic Products," sent out by the drug and cosmetic section of the Chemicals Branch of the War Production Board.

The Toilet Goods Association pointed out that while the form was drawn up before the revocation of L-171, the War Production Board insists that it needs the information which the replies to the questionnaire will furnish. Members of the industry, the association avowed, should fill it out and return it as soon as possible, meeting the fifteen day deadline if that can be done. In cases where the deadline for some reason cannot be met, an extension should be requested from the War Production Board. Every question on this questionnaire must be answered. In cases where all questions are not answered, the questionnaire will be returned for completion.

OPD Price Index

The OIL, PAINT AND DRUG REPORTER'S relative record of prices for chemicals, oils, and drugs is currently as follows:—

Oct. 30, 1942	Oct. 23, 1942	Oct. 31, 1941
138.4	138.5	134.2

The base of the OPD Price Index is the average of prices in 1926 and 1936, those years representing extremes of price undulations in the interwar period.

The downward pressure on prices predominated last week in the markets for chemicals, oils, and drugs. Aside from petroleum, the active items were all agricultural or, in the case of two vitamins, synthetic forms of plant derivatives. The cumulative effect of the changes was a fractional depression of the general price level.

Fatty oils got some more WPB attention with respect to needs for them in the armed forces on our side. Sperm oil got special and different treatment. This group, for once, was without price change except in the pine-products section.

Manufacturing consumers shifted farther to the utilization of available materials for more seasonal goods. Some such categories—cold tablets, for example—were without even hope of volume.

Casein Importation Held Up by WPB

OPD Washington Bureau

Carl M. Loeb, of Rhoades & Co., New York, was prohibited by WPB in a suspension order issued October 30 from taking possession of 100 tons of casein now in customs custody, because the casein had been shipped from Buenos Aires in violation of imports order M-63. The action was the first of its kind.

Order M-63 prohibits importation of casein without specific authorization by WPB.

— OPD : 72d Year —

Container Materials Development Fostered

Organization of several technical committees in the containers industry to assist in the development of substitutes for tin, steel and other critical materials used in the industry, was announced October 30 by William W. Fitzhugh, deputy chief of the WPB containers branch.

The committees, set up voluntarily by the industry, have offered their assistance to the containers branch in solving difficult problems surrounding the development and use of substitute materials. This is in line with the recent statement of the branch pointing out that substitutes should be developed immediately to avoid a serious problem in packing foods and other products.

— OPD : 72d Year —

OPA Allowed To Inspect Books

An executive order signed by President Roosevelt is the basis of inspection by the Office of Price Administration of corporation statistical transcript cards prepared from income and declared value excess-profits tax returns made under the Internal Revenue Code, as amended, for any taxable year ending after June 30, 1941, and before July 1, 1942.

Such inspection is to be in accordance and upon compliance with the rules and regulations prescribed by the Secretary of the Treasury in the Treasury decision relating to the inspection of such cards by the OPA.

— OPD : 72d Year —

Thermoplastics Scheduling Postponed Until January 1

Scheduling of production and delivery under the thermoplastics order M-154 was postponed from November 1, 1942, to January 1, 1943, by amendment No. 4, issued by WPB October 31. Order M-154 otherwise will operate as in the past.

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WPB Chemicals Branch Relocated

OPD Washington Bureau

The chemicals branch of the War Production Board has outgrown its quarters in the Railroad Retirement building and has been shifted over to the Municipal Center building, Third and C streets, N. W., where it will occupy three floors of the new structure. E. W. Reid, chief of the branch, will have his office in room 4014.

Expanded operations of the branch is given as the reason for the move. It already is one of the largest branches in WPB setup, and is still growing with every new curtailment order. The protective coatings section is adding about thirty more people to its staff.

Tankage Price Tops Apply to All Lots

OPD Washington Bureau

Dolars-and-cents ceiling prices previously established for meat scraps and digester tankage will prevail for both full and part car lots, OPA announced October 30, issuing amendment 3 to maximum price regulation 74. This action was taken because many sellers of animal products and feeding stuffs claimed they had no set differentials in price between carload and less-than-carload lot sales.

The original regulation stated that sellers should deduct their March "customary trade differential" in making sales of carload lots, but OPA said sellers generally have refused recently to quote a carload price because the differential under part car lots was difficult to determine. The amendment now permits both full and part car lots to bear the same ceiling, f.o.b. conveyance at production plant. OPA said that as further data are obtained, some fixed differential later may be prescribed.

— OPD : 72d Year —

Consulting Chemists Ass'n Elects Officers

H. P. Trevithick, of the Bureau of Chemistry of the New York Produce Exchange has been elected president of the Association of Consulting and Chemical Engineers, at the annual meeting, held in the Chemists' Club, October 27. He succeeds Louis Weisberg.

Other officers elected were:—Vice-president, Albert Parsons Sachs; treasurer, Henry M. Shields, of the

—Continued on page 65

— OPD : 72d Year —

Totten Made Major For Paint Coordination

OPD Washington Bureau

Irving Totten, of E. I. DuPont de Nemours & Co., has been commissioned a major in the army and assigned to work in the standards and specifications section of the conservation branch of the products division of Services of Supply.

Major Totten's work will be primarily in the field of protective coatings and in this connection he will serve in a coordinating position between the army and the War Production Board with respect to problems arising between the two agencies in this field.

Major Totten is stationed in the Pentagon building, Arlington, Va.

— OPD : 72d Year —

Furfural Price-Control Eased by OPA

OPD Washington Bureau

Furfural was freed from price-control October 30 by OPA to the extend it is sold or delivered for use in the manufacture of synthetic rubber.

Furfural is a volatile, aromatic solvent obtained by distillation of wood, bran, corncobs, and similar materials.

Blackstrap Molasses To Be Ceiled by OPA

OPD Washington Bureau

The Office of Price Administration has announced that it will set specific dollars and cents ceiling prices shortly for beet and cane blackstrap molasses produced at five named United States base point areas. Producers and distributors may use these ceilings as an alternative to their present individual March, 1942, maximums. This action will solve producer pricing problems on two scores that have been troubling the trade:—(1) Many producers did not make deliveries during March, 1942, and thus have no ceiling prices, and (2) producers who did make March deliveries had ceilings based on contract prices set in 1941.

The new amendment will apply only to sales of blackstrap molasses produced in the continental United States. The new amendment will not apply to continentally produced blackstrap molasses sold to or purchased by manufacturers of ethyl alcohol, butyl alcohol, and acetone and other solvents.

Five areas in which blackstrap molasses mills or factories are located

—Continued on page 75

— OPD : 72d Year —

Blackplate Limit On Uses Removed

Limitations on the use of chemically-treated blackplate established by order M-136 have been removed by the Director General for Operations. Chemically-treated blackplate had been restricted to products listed in the tin conservation order (M-81). The restriction was imposed by a provision in order M-136, which sets up controls over the use of blackplate for containers. Amendment to M-136, makes it clear that chemically-treated blackplate can be used interchangeably with ordinary blackplate for packing any of the products listed in the order. Other changes affected by the amendment are:—

1. To provide an increased blackplate quota for packing lye, the order now permits use of blackplate up to 100 percent of the 1941 pack. It restricts containers for lye to 13 ounce cans.
2. Added to the list of permitted uses for blackplate containers are packing hardened edible oils, hardened or un-

—Continued on page 75

— OPD : 72d Year —

Car Club Plan Fostered by OPA

OPD Washington Bureau

Certain industrial and other plants with 100 employees or more will be required to set up Organized Transportation Plans under nation-wide mileage rationing to assure workers adequate means of getting to their jobs despite rationing restrictions, the Office of Price Administration announced today, acting in accord with the national rubber conservation program. The Transportation Plan, in each case, will be organized under a committee, or individual, thoroughly familiar with transportation facilities around the plant, with distances employees must travel, their need for autos to get them to and from work, and their ability to share cars.

— OPD : 72d Year —

Paraphenylphenol Resins Under Total Allocation

OPD Washington Bureau

Paraphenylphenol resins were put under complete allocation and use control by general preference order M-254, issued October 27 by the Director General for Operations. The resins covered by this order include the Bakelite Corporation's BR-254, BK-3962X, and BR-17,000; and the Reichold Chemical Company's superbeckacite 3000. Any person having more than 100 pounds of these resins must report to the Chemicals Branch, WPB, by November 12. The order also gives WPB the right to control, at its discretion, the production of these resins. Forms to be used in applying for permission to deliver, accept delivery of, and use these resins are the standard chemical allocation forms, form PD-600.

Washington Talks It Over

Observations • Prognostications • Developments

By OPD Observer

Secretary Ickes and WPB Chairman Nelson are heading toward another blow-up over the materials problem and how it should be handled. No sooner had peace been restored between them over the pipeline question than the stage was set for another row—this time over government construction projects.

Nelson has ordered construction stopped on six power and irrigation projects to save materials and has ordered sharp curtailment of supplies for other projects. A literal interpretation of the orders, Ickes says, would stop work on the helium plants in Texas and the power projects needed for production of magnesium and light metals which Nelson is trying to get.

So Ickes called up the army and the navy and decided to interpret the orders the way he thought best. This is to keep the construction work going, and he so ordered after asking Nelson to modify the orders and not getting any reply. Aud thus it is that the war program is being "run" (?).

Overdoctoring Soldiers

The army's recruiting of doctors is coming in for some strong criticism in Congress, where it is felt that the armed forces are overdoing the job and raising the danger of a health emergency for the civilian population.

According to Senator Claud Pepper of Florida, who heads up a senate committee that has been studying the manpower problem, approximately one-third of the medical effectives are now in the armed forces. The military services, he said, are trying to maintain a ratio of approximately one doctor for every 100 men in service. If continued this will leave only one doctor for every 3,000 civilians, contrasted with a national average of about one to 1,100 before the war.

He has asked the President to order an immediate survey of medical personnel for both the armed forces and civilian needs and then allocate the supply wherever it is determined an oversupply or undersupply exists.

News by Government

There is a strong rumor around Washington, which refuses to be settled by administration denials, that the New Dealers are toying with the idea of putting the government into the newspaper publishing business to give the "correct" slant on the day's happenings.

At least one newsman claims to have been shown a "dummy" copy—a thirty-two-page paper made up in tabloid form. It contained stories on all the big developments of the day, such as senate action on the tax bill, closing of the gold mines under WPB orders, Roosevelt's message to the AFL convention, etc. It differed from the regular newspapers, however, in that its stories were laden—or larded—with editorial opinion.

OWI described the scheme as "horrifying" and the White House denied knowledge of such a proposal, but the newsmen refuse to be disquieted, recalling Mr. Roosevelt's faultfinding mood with the press upon returning from his recent tour of the country.

First Things Are Last

The "big-inch" oil pipeline to relieve the oil shortage in the East is finally going to be built—with government funds. WPB has suddenly changed its mind and has approved constructon of the second leg of the line from Illinois to the Philadelphia refining area.

The oil industry wanted to construct the line more than a year ago—with its own money—anticipating heavy tanker losses that completely disrupt oil transportation on the Atlantic coast. But the government war agencies couldn't see it. It was turned down first by the old NDAC, twice by the old OPM, and again by WPB. Politics also had its place in the picture.

One argument was that the line would be used to transport natural gas from Texas, and the Texas politicians wanted industries to come to Texas to get fuel cheap. Congressional committees objected because they could not see its need—tanker building would offset transfer of tankers to Britain! By the time the shortage was real—steel was so tight none could be spared for such a project.

Steel is still short, but about thirty States containing a lot of people are being rationed on fuel oil now and if and when tankcars begin breaking down for lack of repairs a lot more people will have to be put under rationing. Politics wouldn't be of any consideration in this situation—or would it?

Farmer Bloc Wants More

Senator Prentice Brown of Michigan, who guided the price bills through the senate for the administration, slipped a fast one over on the farm bloc in the last price bill, and the bloc is plenty mad. But since Brown is a senatorial colleague of theirs the bloc is trying to make Price Administrator Henderson the scapegoat.

It all comes about because of an interpretation of the term "parity" as used in the latest price law. After the bill was passed and sent to the White House Brown inserted a statement in the *Congressional Record* interpreting it to mean that Henderson can consider parity payments, soil conservation payments, and all other Federal benefits received by farmers in arriving at 100 percent of parity at which point he can put ceilings on farm prices.

This means that the prices themselves do not have to reach 100 percent of parity before Henderson can act, but only when the price plus all the benefits raise farmers' income to parity. The farm bloc insists that these benefits must not figure in the computation at all—and thus is laid tthe setting for the latest row between the bloc and the administration.

Brown isn't saying anything. He ducked out of Washington as soon as the bill was passed and has been home campaigning ever since.

Who Pays the More?

It is an error to compare income tax rates of the United States with those of Canada and England to prove that taxes in those nations may be heavier. Simple comparison is not good proof. Forgotten, among other things, are the heavy State and local taxes that must be paid in the United States; also the fact that England relies more heavily on income taxes than does this country.

The method by which rates are applied to income is fully as important as the rates themselves in determining the real burden. England, for instance, taxes real net income, while the United States taxes something more than that.

Holes in Coffee Cans

If, by chance, your next purchase of coffee has a hole punched in the top of the can, don't go to OPA for sympathy. You won't get it.

Ordinarily it would be thought that when the retailer has unvacuumed a can of coffee you shouldn't have to pay the ceiling price for vacuum-packed, but OPA says you do. Coffee cans with a hole in the top carry the same ceiling price as those not punctured.

In fact, OPA likes the idea of puncturing a hole in the can, because it believes this will discourage hoarding against the allowance of only about one cup a day after November 28.

At the Seat of Trouble

WPB has moved to eliminate the fears of the new fathers and mothers that the demands of war may make it difficult to keep the "situation" under control. Current production of baby

—Continued on page 65

Manganese Ore Sales Ceiled by OPA

OPD Washington Bureau

The Office of Price Administration issued October 26 maximum price regulation No. 248 providing maximum prices for all domestic sales of manganese ore of every kind, other than battery or chemical ores.

The order establishes maximum prices to any private buyer as follows:—

(1) For metallurgical manganese ores of a base analysis of manganese 48 percent, iron 6 percent, silica plus alumina 11 percent and phosphorus not over 0.18 percent on a dry basis, the following are maximum prices per gross ton unit (22.4 pounds) of contained manganese, duty, if any paid:

85 cents f.o.b. railroad cars Mobile and New Orleans.
90 cents f.o.b. railroad cars Norfolk, Baltimore, Philadelphia and New York.
96 cents f.o.b. railroad cars Fontana, California; Pueblo, Colorado, and Provo, Utah.

Premiums and penalties for variations in content of manganese and other components from the foregoing base analysis are provided. The basing point to be used in determining the

—Continued on page 31

— OPD : 72d Year —

Export Billing Rule Defined by OPA

OPD Washington Bureau

Formally writing into the revised maximum export price reglation an interpretation which has been applied almost from the outset, the Office of Price Administration October 29 issued an amendment prohibiting an exporter from billing goods at a price in excess of the maximum export price which he might charge his customer on the particular export sale.

In some instances, when acting as distributors or middlemen, foreign buyers have made it a practice to have the exporter bill directly to their customers. However, OPA said, to allow the exporter to invoice at a price which includes both the exporter's price and the distributor's margin might open the way to easy evasion of the export regulation, and the practice has not been permitted where the total price exceeds the maximum price which the exporter might charge his customer under the regulation. This ruling is incorporated in the revised maximum export price regulation as amendment No. 3, effective November 4.

— OPD : 72d Year —

Basic Magnesium Stock Acquired by Anaconda

The Anaconda Copper Mining Company, this city, has acquired for $75,000 the 52½ percent stock interest in Basic Magnesium, Inc., Las Vegas, Nev., which had been held by Howard P. Eeles, jr., and Associates, Cleveland. At the same time, Jess Jones, Secretary of Commerce, has announced that the Defense Plant Corporation has purchased the ore lands of Basic Magnesium for $450,000. J. R. Hobbins, president of Anaconda, has been elected president of Basic Magnesium, and Frederick Liast,

—Continued on page 76

— OPD : 72d Year —

Optical Ass'n 'Trust' Suit Adjourned by U.S.

OPD Washington Bureau

The Department of Justice announced October adjournment of the trial of a civil antitrust suit against the American Optical Company, Bausch & Lomb Optical Company, the Optical Wholesalers National Association, Inc., two patent holding companies, sixty individuals, and eleven other major manufacturers of eyeglasses and spectacles. The suit was brought to trial on November 12, 1941, before Judge John M. Woolsey in the United States. District Court for the Southern District of New York and has been in recess since May 28, 1942. The adjournment followed certification by the Secretaries of War and the Navy that further trial at this time would seriously impede the war effort of the American Optical Company and Bausch & Lomb, the two principal defendants.

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SUBCARBONATE

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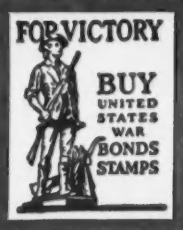

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Chemurgic Conference Set for Nov. 17-18

The third Mid-American Chemurgic Conference of Agriculture, Industry and Science will be held in the Hotel Gibson, Cincinnati, November 17 and 18. The program follows:—

Tuesday, November 17

Address, M. F. Taggart, director of research O'Brien Varnish Company, South Bend, Ind.

"Rubber from Petroleum" (Speaker to be announced).

"Rubber from the Farm," D. Howard Doane, Doane Agricultural Service, St. Louis.

"Processing Synthetic Rubber," Dr. R. V. Yohe, Synthetic Rubber Division the B. F. Goodrich Company, Akron, Ohio.

"Progress Report on Natural and Synthetic Rubber," Dr. Paul J. Kolachov, director of research and development, Joseph E. Seagram and Sons, Inc., Louisville, Ky.

"Better Things for Better Living Through Chemistry," Larry F. Living-

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Soybean Oil Output Rests on Transportation

OPD Washington Bureau

Carryover of a considerable portion, possibly as much as 25,000,000 bushels, of the huge soybean crop for crushing next season is not all unlikely, according to officials of the various government departments and agencies concerned with the processing of this crop, because of the difficult transportation problem now facing the nation.

Officials told OIL, PAINT AND DRUG REPORTER that there is no question of the sufficiency of the capacity of the industry to crush the crop, along with the flaxseed, peanut, and cottonseed crops, but the unknown factor in the situation is transportation facilities to move the beans to the mills. No overall figure on the industry's capacity was given, as officials would not go beyond the statement that the capacity is there and the question is how to make the most of it.

All reports now at hand show that crushing operations are moving forward at a satisfactory rate, but indi-

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Fats, Oils Civilian Quotas Reduced

OPD Washington Bureau

Control over supply of fats and oils was revised October 27 to facilitate deliveries to the armed forces and lend-lease by an amendment to conservation order M-71, issued by the Director General for Operations. Slight adjustments are made in the quotas for civilian use. Order M-71 established certain restrictions on delivery and use of fats and oils, and set up quotas for the amount of fats and oils that could be used for several purposes.

The order made it impossible for military sub-contractors for edible products to avail themselves of the military exemption to the restrictions, and as a result difficulty has been encountered in obtaining adequate de-

Continued on page 69

— OPD : 72d Year —

Fats, Oils Price Control Tightened

OPD Washington Bureau

Purchase of vegetable, oil-bearing materials from a processor, who is to process the oil-bearing materials for the buyer, is forbidden if the combined cost of such materials and the processing toll exceeds the ceiling price set by revised price schedule No. 53 for the type and quantity of oil thus produced, the Office of Price Administration has ruled.

Furthermore, if the meal or other by-products produced from the oil-bearing materials are to be retained by the processor, the value of the meal or other by-products retained must be considered in determining the cost of the toll. This action was termed amendment No. 13 to the fats and oils regulation, and is effective October 31, 1942.

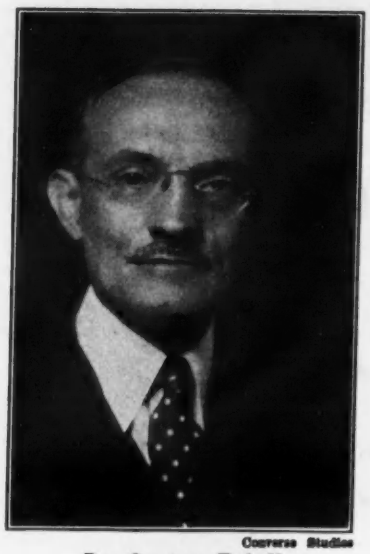
Telephone Calls Under Priority

OPD Washington Bureau

The Board of War Communication has set up a list of priorities on telephone calls. The priorities, effective November 1 are based on:—Important governmental functions; machinery, tools or raw materials for war plants; production of essential supplies; maintenance of essential public services; supply or movement of food, and civilian defense or public health and safety.

Egloff Honored By New York Chemists

Dr. Gustav Egloff, president of the American Institute of Chemists, was the guest of the New York chapter of the institution at a dinner October 23 in the Chemists' Club, this city. Dr. Egloff, who is director of research for the Universal Oil Products Com-



Courtesy Studios

Dr. Gustav Egloff

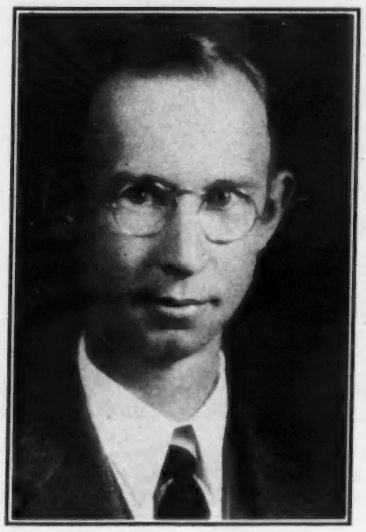
pany, Chicago, entertained and informed the gathering with a discourse on "Wartime Chemicals from Natural Gas."

After dwelling some time on the contributions of natural gas to the providing of substitutes for natural rubber, and summarizing the chemical processes involved, Dr. Egloff declared that the current production program was inadequate. He went on to tell of other important materials in the growing list of industrial chemicals from natural gas and petroleum — toluene, nitroparaffins, ethylene and cyclopropane of an-

—*Continued on page* 69

Paint Production Federation Discusses War Need Projects

In a conference under the auspices of the technical advisory committee, representatives of the constituent clubs of the Federation of Paint and Varnish Production Clubs, October 24 in Pittsburgh, discussed a number of the projects on which the committee is engaged in cooperation with the engineer and ordinance divisions of the United States Army.



Walter F. Kuster

New F.P.V.P.C. President

Walter F. Kuster, the 1942-43 president of the Federation of Paint and Varnish Production Clubs, is technical director for the Carpenter-Morton Company, Boston. He has been with the company through the past ten years. Previously, from 1926, he was associated with E. I. duPont de Nemours & Co., in Pennsylvania and Massachusetts.

Mr. Kuster was born in Bloomsburg, Pa., May 25, 1899, son of William C. and Ida Jane (Foulk) Kuster. He attended the schools of his native city and also went to the State Teachers College there. He spent one subsequent year at Pennsylvania State College and then went to Bucknell University, by which he was graduated in 1926 with a B. S. degree in chemical engineering.

His activities in the local and national affairs of paint production men's organizations have been many for several years. In the past year, as chairman of the plant managers committee of the federation—he also was vice-president—he ably handled the difficult task of conducting an open forum on a correspondence basis. He is a member of the Methodist Episcopal Church and a Mason. He likes gardening, and he bowls for exercise in other seasons.

Mr. Kuster and Miss N. Odessa Fry were married September 17, 1927. They have one daughter, Winifred G., and they reside at 64 Clinton road, Melrose, Mass.

The New Officers

In its business session, the evening of October 23, the federation received the report of the committee on nominations by Robert E. Prince, of James B. Day & Co., chairman, and elected the following officers:—

President, Walter F. Kuster, of the Carpenter-Morton Company, Boston.

Vice-president, Dr. Joseph J. Mattiello, of the Hilo Varnish Corporation, Brooklyn.

Treasurer-emeritus, Clarence W. Clark, of E. I. duPont de Nemours & Co., Chicago.

Treasurer, Paul O. Blackmore, of the Interchemical Corporation, Cincinnati.

Secretary, George B. Heckel, jr., 1524 Chestnut street, Philadelphia.

Other members of the executive committee, Hugh Aiken, of the Piedmont Paint Manufacturing Company, Greenville, S. C.; James E. Creager, of the Jewel Paint & Varnish Company, Chicago; Morris C. Slack, of the St. Louis Surfacer & Paint Company, St. Louis; Robert W. Pearman, of the Frazer Paint Company, Detroit.

As a supplement to the report of the New York subcommittee No. 43 (see *OPD* last week, page 42) Fred Schmutz, of the New Jersey Zinc Company, exhabited a number of luminescent - coated articles. He showed how moisture and acidity affect phosphorescence and pointed out that the best service of luminous coatings in a blackout is usually as a background to bring out articles in silhouette.

Edward Schulte, of the Glidden Company, demonstrated a home-made device for testing the effectiveness of fire-retarding coatings on osnaburg cloth.

Blackout Coatings

Evaluation of blackout coatings for light-obstruction, light-reflection, and weathering was discussed by J. J. Bradley, of Bird & Son. The tendency to crack glass was tested with a 250-watt infra red lamp, Drab paints broke the glass; reds, greens and sands broke it with one coat, but were satisfactory in two coats; white coatings were satisfactory. To prevent glass breakage the coating must have at least 50 percent infrared reflectance.

Captain H. A. Metz, of the ordnance division, raised the point that coatings for glass would be better if easily removed. Major R. B. Breckenridge, of the engineering board, brought an appreciative greeting

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Sperm Oil Allocation Applies to Armed Forces

OPD Washington Bureau

Deliveries of sperm oil to the armed forces were brought under allocation control October 27 with the issuance of an amendment to general preference order M-40 by the Director General of operations. The order as originally issued forbade sale, delivery, and use of sperm oil except when specifically authorized by WPB, but made an exception in the case of the armed forces and Maritime Commission. The new amendment forbids delivery to these agencies except with specific authorization, though restrictions on the use and delivery of sperm oil by these agencies are still exempted from the order. The War Shipping Administration is added to the list of exempted agencies.

The amendment also permits the use and acceptance of 100 pounds or less of oil per month, though sellers may not deliver more than a total of 2,000 pounds per month without authorization, and such deliveries must be in lots of 100 pounds or less.

Two other minor changes in the amendment are: The materials covered by the order are redefined to exclude crude and refined spermaceti, and the restriction on use of sperm oil in lubricating oils is changed to read "sulphurized sperm oil..." instead of "sperm oil."

Concentration of Production

By Joseph L. Weiner

Deputy Director, Office of Civilian Supply, War Production Board.

Address to the Chicago Association of Commerce, October 21, 1942

(*Continued from October 26 issue*)

Munitions Subcontracting

I need not recite to you the history of the efforts made to foster more subcontracting of munitions production. Nor am I in a position to judge whether all that can be done has been done. But I suggest that in many cases it is more feasible to continue the operation of small business concerns by favoring them in the production of civilian-type articles. Some of the more vexing problems involved in subcontracting are avoided. There is no question of the ability of the manufacturer to turn out the article if he has been producing it for a long time.

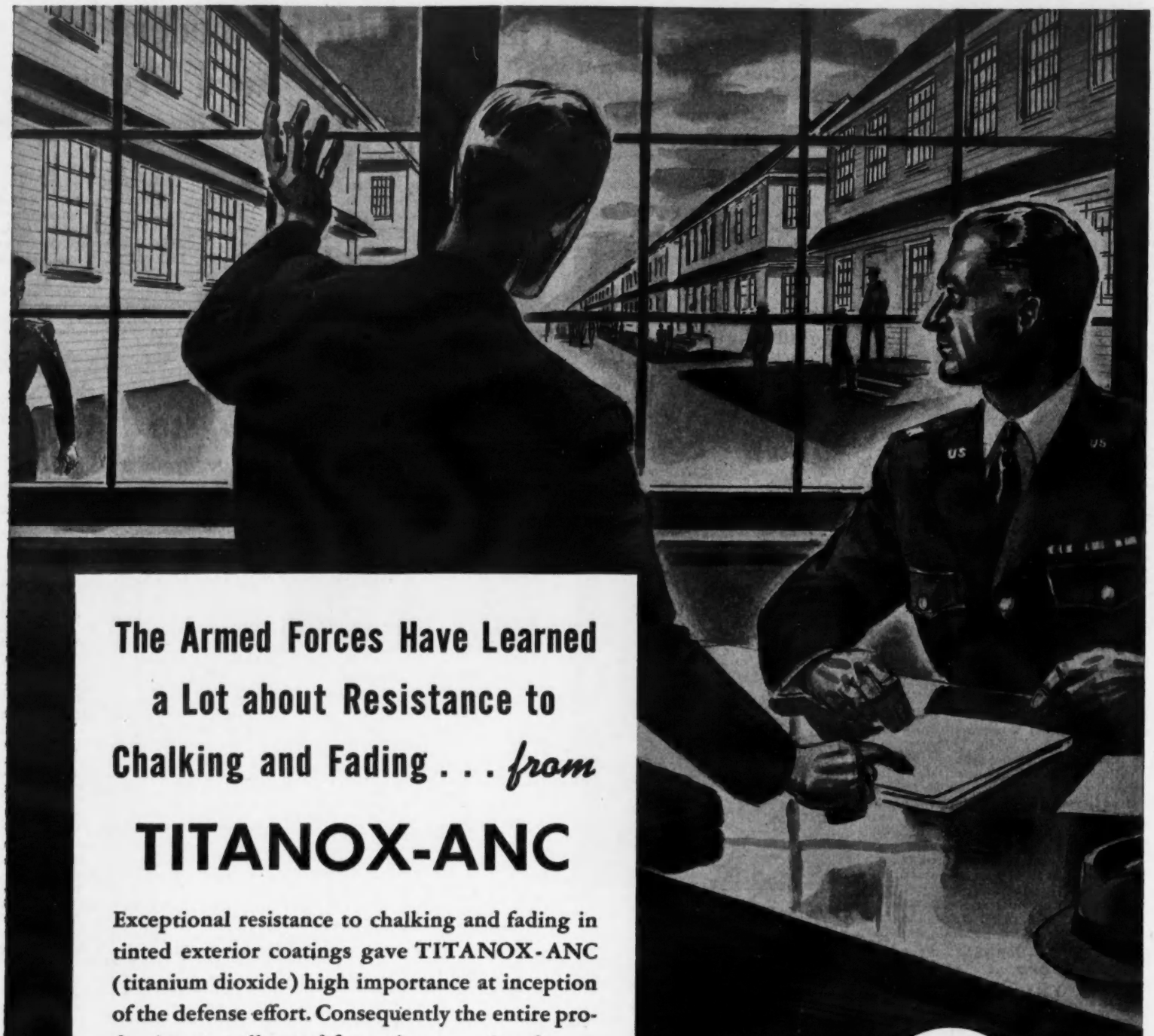
Similarly there is no question of providing him with substantial quantities of new tools, or of giving him the financial and engineering assistance which may be required for a new venture. Consequently, in the selection of nucleus plants in concentration plans for industries producing essential civilian goods, smaller plants generally will be favored, particularly those located in loose labor markets.

Large Plants Convert Easily

The belief that larger plants are more easily and quickly converted to war work is borne out by our experience of concentration of stove production. Of the twenty-seven larger manufacturers, twenty-five have converted to war work. Smaller stove plants located in labor shortage areas, and for that reason eliminated from further stove production, have in most instances also obtained war work.

Plants must, where possible, be closed in areas where labor is scarce or where it is likely to be scarce. Production in areas of labor shortage which could as well be carried on elsewhere obstructs the war effort. It competes for labor with neighboring tank or shipbuilding producers. It

—*Continued on page* 86



The Armed Forces Have Learned a Lot about Resistance to Chalking and Fading . . . *from*

TITANOX-ANC

Exceptional resistance to chalking and fading in tinted exterior coatings gave TITANOX-ANC (titanium dioxide) high importance at inception of the defense effort. Consequently the entire production was allocated for a time to paints for use in relation to the armed forces where it has been employed in larger volume than any other type of titanium oxide.

Available reports indicate that TITANOX-ANC has met all government specifications for non-chalking and resistance to fading.

Due to increased production over and above war requirements this efficient pigment again can be had for normal uses.

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TITANOX

TRADE MARK

Current Market Quotations

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October 30, 1942

Unless otherwise indicated, quotations are first-hands on large lots, f.o.b. New York. Price changes and trends are noted in the market reports, with other informative comment. The locations of the several reports is indicated on page 4.

A

Acacia (see Gum, arabic).

Acetaldehyde, 99%, dms., 55 and 110 gls., works..lb. .11 - —
5 and 10 gls., works.....lb. .14 - —

Acetaldol (see Aldol).

Acetamide, CP, kgs., 5,000 lbs. a year, works..lb. .36 - —
200-lb. lots, works.....lb. .38 - —
100-lb. lots, works.....lb. .55 - —
5 to 50-lb. lots, works....lb. .70 - —
tech., kgs., 5,000 lbs. a year, works..lb. .28 - —
500-lb. lots, works.....lb. .30 - —
100-lb. lots, works.....lb. .45 - —
5 to 50 lb. lots, works....lb. .50 - —

Acetanilide tech., cryst., bbls.lb. .29 - .31
powd., bbls.....lb. .27 - .29
USP, cryst., bbls., 2,000-lb. lots, lb. .36 - —
smaller lots.....lb. .37 - —
dms., 25-lb. lots.....lb. .42 - —
kgs., 2,000-lb. lots.....lb. .37 - —
smaller lots.....lb. .38 - —
powd., bbls., 2,000-lb. lots..lb. .34 - —
smaller lots.....lb. .35 - —
dms., 25-lb. lots.....lb. .40 - —
kgs., 2,000-lb. lots.....lb. .35 - —

Acetoacetanilide, dms.....lb. .49 - .67

Acetone, CP,[1] dms., c.l., dlvd..lb. .*08½- —
l.c.l., dlvd.....lb. *.09 - —
tanks, dlvd.....lb. *.07 - —

Methyl (see M).

* OPA ceiling for Eastern territory (the States of New Mexico, Colorado, Wyoming, Montana and all States east thereof); ceilings ½c. per lb. higher for Western territory (all other States of the United States).

Acetonitrile, dms., works.....lb. 1.00 - 2.00

Acetophenetidin, bbls., kgs., 1,000 lbs..lb. 1.00 - —
dms., 50 lbs.....lb. 1.08 - —
25 lbs.....lb. 1.10 - —

Acetophenone, cns., dms.....lb. 1.55 - 1.60

Acetyl chloride, cbys., works..lb. .60 - —

Acid, abietic, dms., c.l., f.o.b. all points in U. S. E. of and including Kans., Neb., N. D., Okla., S.D., Tex. E. of Austin and Brownsville..lb. .08¾- —

Acetic,[2] com'l or redist., 28%, bbls..100 lbs. 3.38 - 3.63
cbys., cs.....100 lbs. 3.88 - 4.13
50%, bbls.....100 lbs. 5.58 - 5.83
cbys., cs.....100 lbs. 6.08 - 6.58
70%, bbls.....100 lbs. 6.68 - 6.93
cbys., cs.....100 lbs. 7.18 - 7.43
80%, bbls.....100 lbs. 7.47 - 7.72
cbys., cs.....100 lbs. 7.97 - 8.12
glacial, nat., CP, cbys.100 lbs.13.50 -13.75
95.5%, bbls.....100 lbs. 9.15 - 9.40
cbys. .....100 lbs. 9.65 - 9.90
tanks, works.....100 lbs. 6.93 - —
USP, cbys.....100 lbs.11.70 - —
synth, CP, dms., works.....100 lbs.13.50 -13.75
99.5%, bbls., c.l., works.....100 lbs. 9.15 - 9.40
tanks, works.....100 lbs. 6.25 - 6.93
USP XI, al. dms., works, 100 lbs.10.95 -11.20
pure, 80%, bbls.....100 lbs. 4.44 - 4.69
cbys., cs.....100 lbs. 4.94 - 5.19
36%, bbls.....100 lbs. 4.86 - 5.11
cbys., cs.....100 lbs. 5.36 - 5.61
60%, bbls.....100 lbs. 7.60 - 7.85
cbys., cs.....100 lbs. 8.10 - 8.35
80%, bbls.....100 lbs. 9.26 - 9.51
cbys., cs.....100 lbs. 9.76 -10.01

Acetic acid price differentials above are for c.l. and l.c.l. quantities; the prices apply delivered within the Metropolitan zones unless otherwise indicated in the above prices.

Acetic, anhydride, [3,6] dms., c.l., frt. alld..lb. .11½- —
l.c.l., dms., frt. alld.....lb. .13 - —

Acetylsalicylic,[1] producers, primary jobbers, special, USP, 200-lb. bbls., f.o.b. shipment point*..lb. .45 - —
100-lb. kgs., same basis. lb. .45 - —
25-lb. dms., same basis. lb. .46 - —
5-lb. ctns., same basis. lb. .59 - —
†1-lb. ctns., same basis. lb. .61 - —
Standard USP, fine cryst., gran. (20-40 mesh), powd. (50 mesh), 200-lb. bbls., same basis..lb. .40 - —
100-lb. kgs., same basis. lb. .40 - —
25-lb. dms., same basis. lb. .41 - —
5-lb. ctns., same basis. lb. .54 - —
1-lb. ctns.,† same basis. lb. .56 - —

*Freight equaled, shipment identical quantity, over standard routes, from N. Y. City, Phila., Midland, Mich.; Chicago, and St. Louis.
†3c. per lb. may be added for acid packaged in canisters, and 8c. per lb. when packaged in 1-lb. bots.

Adipic, fib., dms., works....lb. .31 - —
Anthranilic, resub., bbls....lb. 1.20 - 1.25
tech., bbls.....lb. .95 - —
Arsenious,[6] tech. (see Arsenic, White).
USP, powd., dms., kegs....lb. .20 - .22
Ascorbic,[1] bots., dms.....oz. 1.25 - 1.45
Battery, cbys., c.l., E. works, 100 lbs. 1.60 - —
10-25, E. works....100 lbs. 1.95 - —
1-9, E. works....100 lbs. 2.55 - —
Benzoic, tech., bbls., 4,000 lbs. or more..lb. .43 - —
1,000 to 3,900 lbs.....lb. .44 - —
900 lbs. or less.....lb. .47 - —
Acid, benzoic, USP, bbls., 4,000 lbs. or more..lb. .54 - —
1,000 to 3,900 lbs.....lb. .55 - —
900 lbs. or less.....lb. .58 - .59
dms., 4,000 lbs. or more..lb. .55 - .56
1,000 to 3,900 lbs.....lb. .56 - .57
900 lbs. or less.....lb. .59 - .60

Boric,[3] tech., 99.5% gran., bulk, bgs., c.l., frt. alld..ton.99.00 - —
ton lots, ex whse....ton.111.00 - —
less than ton lots, ex whse..ton.116.00 - —
bbls., c.l., frt. alld....ton.109.00 - —
ton lots, ex whse....ton.121.00 - —
less than ton lots, ex whse..ton.126.00 - —
bulk, frt. alld.....ton.95.50 - —
powd., bgs., c.l., frt. alld. ton.104.00 - —
ton lots, ex whse....ton.116.00 - —
less than ton lots, ex whse..ton.121.00 - —
bbls., c.l., frt. alld...ton.114.00 - —
ton lots, ex whse...ton.126.00 - —
less than ton lots, ex whse..ton.131.00 - —
USP $25 per ton higher.

Butyric, 99%, dms., c.l., S. Charleston, W. Va..lb. .22 - —
l.c.l., same basis.....lb. .23 - —
tanks, same basis.....lb. .21 - —

Broenner's, bbls.....lb. 1.11 - —

Cacodylic, 5-lb. bots.....lb.22.00 - —

Camphoric, cns.....lb. 6.95 - 7.00

Capric, dms.....lb. .21½ Nom.

Capyrlic, dms.....lb. .27 - .27½

Castor oil,[3] split, dms.....lb. .20¾- .21¼

Chlorosulphonic, dms., c.l., wks. lb. .03 - —
5-drum lots, works.....lb. .03½- —
single drums.....lb. .04½- —
tanks, works.....lb. .02½- —

Chromic,[3,5] 99%, dms., c.l., dlvd. N.Y..lb. .15¼- —
l.c.l., 5 tons, dlvd. N. Y., lb. .16¾- —
smaller quantities, dlvd. N.Y..lb. .17¼- .18¼

Cinnamic, refd., bots.....lb. 3.50 Nom.

Citric[1] cryst., gran., bbls., car lots..lb. .20 - —
10,000-lb. lots, one ship. lb. .20½- —
200-10,000 lbs.....lb. .21 - —
100 lbs., dms., or kgs..lb. .21½- —
50 lbs., dms., or ctns..lb. .23 - —
25 lbs., dms., or ctns..lb. .24 - —
5 lbs., in 5-lb. cont....lb. .29 - —
anhyd., gran., dms., c.l.lb. .22½- —
10,000 lbs., one shipment. lb. .23 - —
smaller lots.....lb. .23½- .26½

Citric acid quotations on powder are ½c. higher than on granular. Keg packing is ½c. higher than barrels. Prices are f.o.b. N.Y. Chicago and St. Louis deliveries are ½c. higher than N.Y.

Cleve's, bbls.....lb. .65 - —

Coconut oil,[3] dist., dms.....lb. .18½ Nom.

Cottonseed oil,[3] dist., dms....lb. .14½- .15
tanks .....lb. .14 - —

Cresylic (coaltar),[6] high-boil 50%, 210°-215°, dms., c.l., works, frt. equald..gal. .81 - —
l.c.l., same basis.gal. .83 - —
tanks .....gal. .75 - —
special blends (50%, 210°-215°) dms., c.l., works, frt. equald..gal. .81 - —
l.c.l., same basis.....gal. .83 - —
tanks .....gal. .75 - —
low-boil (50%, 204°-206°), dms., c.l., works, frt. equald.gal. .81 - —
l.c.l., same basis...gal. .83 - —
tanks .....gal. .75 - —
special blends (50%, 204°-206°), dms., c.l., works, frt. equald..gal. .81 - —
l.c.l., same basis...gal. .83 - —
tanks .....gal. .75 - —

Diethylbarbituric (see Barbital).

Formic, dom., 90%, cbys., c.l., works..lb. .10½- —
l.c.l., 5 cbys. and over..lb. .11 - —
1-24 cbys.....lb. .11½- —

Fumaric, tech., special, bbls., ton lots..lb. .27 - —
smaller lots. bbls., dms...lb. .28 - .31

Gallic, NF VI, bbls., 200 lbs., 5 or more..lb. 1.27 - —
less than 5.....lb. 1.30 - —
fib. dms., 25 lbs.....lb. 1.34 - —
technical, bbls.....lb. 1.10 - 1.12

Gamma, bbls.....lb. .85 - —

Gluconic, tech., 50%, bbls., 500 lbs..lb. .12 - —
100-lb. kgs.....lb. .15 - —
25 or 50-lb. demij.....lb. .21 - .23
5-lb. bots.....lb. .29 - —

H, bbls.....lb. .45 - —

Hydriodic, 45-47%, cbys.....lb. 2.42 - 2.44
5-lb. bots.....lb. 2.57 - —
57%, bots.....lb. 2.90 - —
Acid, hydrobromic, dilute, 10%, cbys..lb. .20 - —
concentrated, 34%, cbys....lb. .35 - —

Hydrochloric (see Muriatic).

Hydrocyanic, cyls., works....lb. .80 - 1.00

Hydrofluoric, 30%, bbls.....lb. .06 - .06½
rubber dms.....lb. .08 - .08½
48%, lead cbys.....lb. .12 - —
rubber dms.....lb. .11 - —
52%, lead cbys.....lb. .13 - —
rubber dms.....lb. .12 - —
60%, lead cbys.....lb. .14 - —
rubber dms.....lb. .13 - —

Hydrofluosilic, 30-35%, 420 lbs., bbls..lb. .08 - .09

Hypophosphorus, USP, 30%, djns., lb. .75 - 80

Lactic, edible, 50%, cbys., 20 or more..lb. .12½- —
5 to 19.....lb. .13 - —
1 to 4.....lb. .13½- —
80%, bbls., cbys., 5 or more, lb. .24¼- —
1 to 4.....lb. .24¾- —
plastic grade, bbls., cbys., 20 or more..lb. .14¼- —
5 to 10 cbys.....lb. .14¾- —
1 to 4 cbys.....lb. .15¼- —
tech., dark, 22%, bbls., c.l., works..100 lbs. 2.90 - —
l.c.l., works.....100 lbs. 3.15 - —
cbys., works.....100 lbs. 4.15 - —
44%, bbls., c.l., works.. 100 lbs. 6.30 - —
l.c.l., bbls., works..... 100 lbs. 6.55 - —
cbys., works.....100 lbs. 7.55 - —
light, 22%, bbls., c.l., works, 100 lbs. 3.90 - —
l.c.l., works.....100 lbs. 4.15 - —
cbys., works.....100 lbs. 5.15 - —
44%, bbls., c.l., works.... 100 lbs. 7.30 - —
l.c.l., works.....100 lbs. 7.55 - —
cbys., works.....100 lbs. 8.55 - —
USP XI, 85%, cbys.....lb. .54 - .57
USP VIII, 75%, cbys.....lb. .52 - .56

Lauric, dist., tech., dms....lb. .20 Nom.

Laurent's, bbls.....lb. .45 - —

Linseed oil,[3] light, dms.....lb. .20¼- .20¾

Maleic, powd., dms.....lb. .30 - —
anhydride, dms., c.l.....lb. .25 - —
l.c.l. .....lb. .26 - —

Malic, powd., kgs.....lb. .47 - —

Mandelic, dms., 1,000 lbs.....lb. 2.05 - —
smaller lots.....lb. 2.10 - 2.30

Mixed, tanks, nitric unit....lb. .05 - .06
sulphuric unit.....lb. .0085- .009

Molybdic, kgs., works.....lb. .95 - 1.10

Monochloroacetic, tech., bbls.lb. .17 - —
purified, bbls.....lb. .20 - —

Monosulphonic, bbls.....lb. 1.50 - —

Muriatic, 18°, cbys., c.l., E. works..100 lbs. 1.50 - —
l.c.l., 25 and over, E. works..100 lbs. 1.75 - —
10 to 24, works...100 lbs. 1.85 - —
1 to 9, works...100 lbs. 2.45 - —
tanks, works.....100 lbs. 1.05 - —
20°, cbys., c.l., E. works.... 100 lbs. 1.75 - —
l.c.l., 25 and over, works. 100 lbs. 2.00 - —
10 to 24, works...100 lbs. 2.10 - —
1 to 9, works...100 lbs. 2.70 - —
tanks, works.....100 lbs. 1.15 - —
22°, cbys., c.l., E. works.... 100 lbs. 2.25 - —
l.c.l., 25 and over, works.. 100 lbs. 2.50 - —
10 to 24, works...100 lbs. 2.60 - —
1 to 9, works...100 lbs. 3.20 - —
tanks, works.....100 lbs. 1.85 - —
CP, dealers, cbys.....lb. .06½- —
6-lb. bots.....lb. .17½- —
consumers, cbys.....lb. .08 - —
6-lb. bots.....lb. .19 - —

Myristic, dist., dms.....lb. .19 - .19½

Naphthenic,[6] 220-230 acidity, dms., c.l., works..lb. .13 - —
l.c.l., works.....lb. .13 - —
tanks, works.....lb. .10 - —
235-245 acidity, dms.. c.l., works..lb. .13 - —
l.c.l., works.....lb. .15 - —
tanks, c.l., works.....lb. .12 - —

Nicotinic, 1,000-lb. lots, fib. dms. lb. 5.00 - —
100-lb. fib. dms.....lb. 5.15 - —
50-lb. fib. dms.....lb. 5.25 - —
25-lb. fib. dms.....lb. 5.30 - —
5-lb. tins.....lb. 5.40 - —
1-lb. bots.....lb. 5.50 - —

Nicotinic, amide, 25-lb. lots..lb. 9.00 - —
smaller lots.....lb. 9.10 - 9.14

Nitric, 36°, cbys., c.l., E. works. 100 lbs. 5.00 - —
l.c.l., 25 and over, E. works..100 lbs. 5.25 - —
10 to 24, works...100 lbs. 5.35 - —
1 to 9, works...100 lbs. 5.95 - —
38°, cbys., c.l., E. works.... 100 lbs. 5.50 - —
Western, works...100 lbs. 5.75 - —
Acid, nitric, 38°, cbys., l.c.l., 25 and over, E. works.... 100 lbs. 5.75 - —
10 to 24, works...100 lbs. 5.85 - —
1 to 9, works...100 lbs. 6.45 - —
40°, cbys., c.l., E. works.... 100 lbs. 6.00 - —
l.c.l., 25 and over, E. works, 100 lbs. 6.25 - —
10 to 24, works...100 lbs. 6.35 - —
1 to 9, works...100 lbs. 6.95 - —
42°, cbys., c.l., E. works.... 100 lbs. 6.50 - —
l.c.l., 25 and over, works, 100 lbs. 6.75 - —
10 to 24, works...100 lbs. 6.85 - —
1 to 9, works...100 lbs. 7.45 - —
CP, USP, dealers, cbys.....lb. .11½- —
7-lb. bots.....lb. .21½- —
consumers, cbys.....lb. .13 - —
7-lb. bots.....lb. .23 - —

Oleic (see Oil, red).

Oleum (see Sulphuric fuming).

Oxalic,[1] dom., bbls., c.l., works, lb. .11¼- —
900 lbs. or over.....lb. .11½- —
smaller quantities...lb. .12½- —

Palm oil,[3] white dist., dms..lb. .13 - .13¼
tanks .....lb. .12½- —

Paraminobenzoic, cns.....lb. 1.40 - —

Paranitrobenzoic, cns.....lb. .72 - —

Phenylacetic, bots.....lb. 1.85 - 1.90

Phosphoric, pure food grade, 50%, c.l., bbls., works, frt. equald..100 lbs. 4.00 - 4.25
cbys., works, frt. equald.. 100 lbs. 4.35 - 4.60
l.c.l., 10 or more, works, frt. alld..100 lbs. 5.25 - 6.25
1 to 9, cbys., works, frt. alld..100 lbs. 6.25 - 7.25
tankwagon, dlvd., N. Y., Phila., Met. area..100 lbs. 4.00 - —
75%, c.l., bbls., works frt. equald..100 lbs. 4.75 - 5.00
cbys., works, frt. equald.. 100 lbs. 5.10 - 5.35
l.c.l., 10 or more, works, frt. alld..100 lbs. 7.00 - 8.50
1 to 9, cbys., works, frt. alld..100 lbs. 8.00 - 9.50
tankcars, works, frt. eqcald..100 lbs. 4.00 - 4.25
tankwagons, dlvd., N. Y., Phila., Met. area..100 lbs. 4.75 - —
USP, 85%, s. g., 1,710 cbys., 180 lbs..lb. .12 - —
50%, s. g., 1,347 cbys., 70 lbs..lb. .10¼- —
dms., 25 lbs.....lb. .13 - —
10%, dilut., cbys., djns...lb. .07 - .07½
Picramic, kgs.....lb. .65 - .70
Picric, bbls.....lb. .35 - —
Propionic, synth., pure, 55-gal. dms., returnable, works..lb. .14 - —
tanks, works.....lb. .11 - —
Pyrogallic, tech., lump, powd., bbls..lb. 1.45 - —
cns.....lb. 1.63 - —
USP, cryst., cns.....lb. 2.10 - —
resub., cns.....lb. 2.60 - —
Pyroligneous, bbls., dlvd. E..gal. .26 - —
Ricinoleic, com'l, split (see Acid, castor oil, split).
tech., dms., works.....lb. .52 - .57
Salicylic,[1] tech., bbls.....lb. .33 - —
USP, bbls.....lb. .35 - .40
Sebacic, tech., bbls., works..lb. .65 - .69
Soybean oil,[3] dist., dms.....lb. .18¾- .19¼
Stearic,[3] double pressed, bgs., dlvd..lb. .14 - .15
single pressed, bgs., dlvd..lb. .13½- .14½
triple pressed, bgs., dlvd..lb. .17 - .18
Succinic, bbls.....lb. .75 - —
Sulphanilic, CP, bots., works..lb. 1.60 - 1.68
tech., dms., works.....lb. .17 - —
Sulphuric, 60°, cbys., c.l., E. works..100 lbs. 1.25 - —
l.c.l., 25 and over, works, 100 lbs. 1.50 - —
10 to 24, works...100 lbs. 1.60 - —
1 to 9, works...100 lbs. 2.20 - —
tanks, E., works.....ton.13.00 - —
66°, cbys., c.l., E. works.... 100 lbs. 1.50 - —
l.c.l., 25 and over, works, 100 lbs. 1.75 - —
10 to 24, works...100 lbs. 1.85 - —
1 to 9, works...100 lbs. 2.45 - —
tanks, E., works.....ton.16.50 - —
98°, tanks, works.....ton.17.50 - —
CP, USP, dealers, cbys.....lb. .06¼- —
consumers, cbys.....lb. .08 - —
9-lb. bots.....lb. .17 - —
fuming, 20%, tanks, E. works, ton.19.50 - —

Tannic,[6] tech., bbls., dms...lb. .71 - .73
USP, fluffy, bbls., 1,000-lb. lots..lb. 1.33 - —
100-lb. lots.....lb. 1.35 - —
25-lb. lots.....lb. 1.38 - —
powd., bbls., 1,000 lbs....lb. 1.13 - —
smaller lots.....lb. 1.15 - —

Tartaric, USP, dom., cryst., gran., powd., bbls., 10,000 lbs. or more, one shipt..lb. .70½- —
smaller quantities.....lb. .71 - —
kgs. .....lb. .71½- —

Tobias, bbls.....lb. .55 - .60

Trichloroacetic, bots.....lb. 2.00 - 2.50

Tungstic,[6] CP, 100-lb. pkgs..lb. 2.94 - 3.10
pure, 100-lb. pkgs.....lb. 2.86 - —

Aconite leaves, bls.....lb. 1.40 - 1.45
Root, bls.....lb. 1.85 - 1.90

Aconitine, amorph., bots.....oz.28.00 -28.00
15-gr. vials.....vial. 1.60 - —
cryst., bots.....oz.42.00 -45.00
15-gr. vials.....vial. 1.60 - —

Wartime Status of Materials

Applications of WPB and OPA regulations to materials listed in this section are indicated by superior figures as follows:—

[1]—Price Ceiling • [2]—Price Suggestion or Agreement
[3]—Full Priority Control • [4]—Industry Control
[5]—General Limitation Order • [6]—Allocation

Acrylonitrile,[6] dms., c.l.....lb. .34½- —
5,000 lbs. or more.....lb. .35 - —
1 ton to 4,999 lbs.....lb. .35½- —
1 dm. to 1 ton.....lb. .34 - —
tankcars .....lb. .34 - —

Adeps lanae,[1] U.S.P., anhdyd., dms..lb. .30 - .33
hyd., dms.....lb. .29 - .32

Agar,[2] Kobe, No. 1, strip.....lb. 3.50 - —
dom., f.o.b. San Diego, Cal..lb. 3.00 - —

Agaric, white, bls.....lb. No stocks

Albumen, blood, dom., dms., f.o.b. Chicago..lb. .65 - .70
soluble, dried, c.l., same basis..lb. .13½- —
bg. lots, same basis.....lb. .15 - .20
imported, bgs.....lb. No prices

Egg, ed., dom., cryst., bbls..lb. 1.75 - 1.78
powd., dms., bbls.....lb. 1.81 - 1.86
tech., cryst., bbls.....lb. 1.60 - 1.65
import, cs.....lb. No prices

Alcohol, amyl (see also Fusel oil, refd.), ex pentane, dms., c.l., frt. alld, E. of Miss. R..lb. .141 - —
l.c.l., frt. alld.....lb. .151 - —
tanks, frt. alld.....lb. .131 - —
normal, dms., l.c.l., works..lb. .27 - —
tertiary, refd., dms., l.c.l., frt. alld. E. of Miss. R..lb. .09 - —
Benzyl, cns.....lb. .65 - .75
dms.....lb. .63 - —
Butyl, normal,[1,5] dms., c.l., frt. alld..lb. *.13½- .15¼
l.c.l., frt. alld.....lb. *.14 - .15¾
tanks, frt. alld.....lb. *.12½- .14¼

* The term 'Eastern' territory means the States of New Mexico, Colorado, Wyoming, Montana and all States east thereof, and the term 'Western' territory shall mean all other States of the United States.

secondary,[5] dms., c.l., frt. paid E. of Miss..lb. .09½- —
l.c.l., same terms.....lb. .10 - —
tanks, same terms.....lb. .08¼- —
tertiary, denaturing, c.l., dms., lb. .12½- —
l.c.l., dms.....lb. .13 - —

Cetyl, dom., CP, fiber ctns., 1,000 lbs..lb. 1.50 - —
500 lbs.....lb. 1.70 - —
100 lbs.....lb. 1.80 - —
25 lbs.....lb. 1.90 - —
5 lbs.....lb. 2.00 - —
Cinnamic, bots.....lb. 3.00 - 3.60
Denatured,[1,5,6] CD14, dms., c.l., divd. E...gal. .65 - —
l.c.l., divd., dms.....gal. .70 - —
tanks, E., divd.....lb. .58 - —

Prices for territories other than E. of Rockies are 5c. per gal. less than Eastern works quotations. Tankcar sales require written authorization by Alcohol Tax Unit.

SD1, 190 pf., bbls., c.l., E. works..gal. .64 - —
19 bbls., E. works...gal. .66 - —
1 to 18 bbls., E. works, gal. .69 - —
dms., c.l., E. works...gal. .60 - —
19 dms., E. works...gal. .62 - —
1 to 18 dms.....gal. .65 - —
tanks, E. works.....gal. .53 - —
Anhydrous 3c. per gal. higher.
SD2B, dms., c.l., works, E... gal. .57 - —
19 dms., works, E...gal. .59 - —
1 to 18 dms., works, E. gal. .62 - —
tanks, E. works.....gal. .50 - —
SD2G (Replaced by SD23H).
SD23H, works, c.l., dms..gal. .60½- —
19 dms.....gal. .62½- —
1 to 18 dms.....gal. .65½- —
tanks .....gal. .53½- —
SD29, denatured with acetaldehyde, dms., c.l., E. works..gal. .59 - —
l.c.l., 19 or more, E. works..gal. .61½- —
1 to 18, E. works...gal. .64½- —
tanks, E. works.....gal. .51 - —

When any of the several SD29 denaturants is supplied by the purchaser, the prices are the same as those for SD2B, plus 1½c. per gal. denaturing charge.

Special solvent, dms., c.l., works..gal. .61 - —
20 dms., to c.l.....gal. .63 - —
1 to 9 dms.....gal. .66 - —
tanks, E. works.....gal. .54 - —

Tankcar sales require written authorization by Alcohol Tax Unit.

Diacetone, acetone-free, dms., c.l., divd..lb. .11¼- .14½
l.c.l., divd.....lb. .12 - .15
tanks, divd.....lb. .10¼- .13½
tech., dms., c.l., divd.....lb. .11 - .13½
l.c.l., divd.....lb. .11¼- .14
tanks divd.....lb. .10 - .12½
Ethyl, 190 pf., ex. molasses, dms., c.l..gal. 8.19 - —
19 dms.....gal. 8.22½- —
5 to 8 dms.....gal. 8.25½- —
1 to 4 dms.....gal. 8.25½- —
tanks .....gal. 8.12 - —
absolute, dms., c.l.....gal. 8.64 - —
5 to 18 dms.....gal. 8.70½- —
1 to 4 dms.....gal. 8.70½- —

Ethyl alcohol in bbls. 4c. higher than dms. Grain alcohol is 10c. per gallon more than the above prices on molasses alcohol.

Ethylhexyl, dms., c.l., works..lb. .24 - —
l.c.l., same basis.....lb. .25 - —
tanks, same basis.....lb. .23 - —
Furfuryl, tech., cns., works..lb. .35 - —
dms., c.l., 33,000 lbs., works, lb. .22½- —
l.c.l., 500 lbs. and more, works..lb. .25 - .35
tanks, wks.....lb. .20 - —
Isoamyl (see Carbinol Isobutyl).
Isobutyl, refd., dms., works..lb. .0860- —
tanks, same basis.....lb. .0760- —
Isopropyl,[3,4] refd., 91%, dms., 5 gals., f.o.b. dest..gal. .66½- —
55 gals., c.l., same basis, gal. .40½- —
l.c.l., same basis...gal. .43½- —
tanks, frt. alld.....gal. .34 - —
99%, dms., 5 gals., same basis..gal. .65 - —
55 gals., c.l., same basis, gal. .44 - —
l.c.l., same basis...gal. .47 - —
tanks, same basis.....gal. .37 - —
Methyl (see Methanol).
Phenylethyl, bots., cns.....lb. 2.10 - 2.50
Polyvinyl, type A, fiber-pack, 2,000 lbs. and over, f.o.b. cars, Niagara Falls..lb. .65 - —
less than 2,000 lbs.....lb. .70 - —
type B, fiber-pack, 2,000 lbs. and over, same basis..lb. .60 - —
less than 2,000 lbs.....lb. .65 - —

Alcohol, propyl, normal, dms., works..gal. .67 - .70
Octyl (see Ethylhexyl alcohol).
Tetrahydrofurfuryl, dms., contract, 6,000 lbs., f.o.b. Waverly, N. Y..lb. .44 - —
475-lb. lots, same basis...lb. .50 - —
car lots, wks.....lb. .40 - —
cns., f.o.b. Cedar Rapids, Ia., lb. .55 - —
Alcohol, denat. grade, dms., tanks, works..gal. .70 - .72
Aldol, 55 and 110-gal. dms., c.l., works..lb. .12 - —
l.c.l., works.....lb. .13 - —
5-10-gal. dms., works...lb. .15 - —
Aletris root, bgs.....lb. .60 - .85
Alizarin (see Red, alizarin).
Alkanet root, bgs.....lb. 1.75 - 1.80
Allspice,[1] Mexican, bgs.....lb. .22 - .23
Alpha tocopherol, ampules, per gram. 1.00 - 1.50
Aloe, Cape, cs.....lb. .17 - .18
Curacao, cs.....lb. .65 - .70
gourds, bbls.....lb. .80 - .85
Socotrine, kgs.....lb. .58 - .60
Aloin, 140-lb. bbls.....lb. 5.45 - —
100-lb. kgs.....lb. 5.47 - —
25-lb. fib. dms.....lb. 5.54 - —
Alphanaphthol, bbls.....lb. .52 - —
Alphanaphthylamine, bbls.....lb. .32 - —
Althea root, whole, bbls.....lb. .68 - 1.35
Alum, ammonia,[6] burnt, USP, bbls., kgs..lb. .16 - .18
gran., bbls., works....100 lbs. 4.00 - —
divd., N. Y., Phil..100 lbs. 4.00 - —
lump, bbls., works....100 lbs. 4.25 - —
divd., N. Y., Phil..100 lbs. 4.25 - —
powd., bbls., works....100 lbs. 4.40 - —
divd., N. Y., Phil..100 lbs. 4.40 - —

Ammonia alum prices are for contract and open market; f.o.b. Phila.; frt. equalized with Marcus Hook, Boston, Atlanta, or Joliet; rail or water rates, whichever is lower. L.c.l. quantities must carry l.c.l. rate applying; for truck or ex warehouse deliveries all metrop. zones (except N. Y.) add l.c.l. rail or water rate, whichever is lower, from shipping or equalization point, divd., N.C. price apply to truck or ex warehouse.

Potash, gran., bbls., works.... 100 lbs. 4.25 - —
divd., N. Y., Phila..100 lbs. 4.25 - —
lump, bbls., works....100 lbs. 4.50 - —
divd., N. Y., Phila..100 lbs. 4.50 - —
powd., bbls., works....100 lbs. 4.65 - —
divd., N. Y., Phila..100 lbs. 4.65 - —
Potash alum prices or same basis as those for ammonia alum.
Chrome, bbls.....lb. .12½- .15
Soda, bbls., c.l., works..100 lbs. 3.25 - —
l.c.l., divd.....100 lbs. 4.25 - 5.00
Alumina acetate, solut., 24%, l.c.l., bbls., 10 or over, divd..lb. .10½- —
1 to 9, divd.....lb. .11 - —
normal, solut., 20%, bbls., l.c.l., 10 or over, divd..lb. .09½- —
1 to 9, divd.....lb. .10 - —
Chloride, anhyd., com'l, dms. (extra), 45,000 lbs. and over, works..lb. .08 - —
12,100 to 40,000 lbs., works..lb. .09 - —
1,100 to 11,000 lbs., works, lb. .10 - —
140 to 575 lbs., works.lb. .11 - —
100 lbs. or less, works.lb. .12 - —
cryst., com'l, dms., c.l., works, lb. .06 - —
l.c.l., works.....lb. .06½- .06¾
solut., 32 deg., cbys., c.l., works..lb. .02¾- —
l.c.l., works.....lb. .06½- —
Fluoride, bbls.....lb. .35 - .40
Hydrate,[6] heavy, bbls., c.l., works..lb. .0340- —
l.c.l., bbls., works.....lb. .04 - —
bgs., c.l., works.....lb. .1310- —
light, 50-lb. bgs., divd....lb. .14½- —
90-lb. bbls., divd.....lb. .15 - —
Oleate, dms., contract.....lb. .24½- —
Palmitate, precip., bbls.....lb. .25 - .28
Resinate, precip., dms.....lb. .15½- —
Stearate, precip., bbls., ctns., c.l..lb. .23 - —
l.c.l. .....lb. .24 - —
Sulphate, com'l, bgs., c.l., works, frt. equaled..100 lbs. 1.15 - 1.25
l.c.l., works, frt. equald., 100 lbs. 1.40 - 1.50
Alumina sulphate, com'l., bbls., c.l., works..100 lbs. 1.35 - 1.45
l.c.l., works, frt. equald.. 100 lbs. 1.60 - 1.70
iron free, bgs., c.l., works, 100 lbs. 1.75 - 1.85
l.c.l., works.....100 lbs. 2.00 - 2.10
bbls., c.l., works.....100 lbs. 1.95 - 2.05
l.c.l., works.....100 lbs. 2.20 - 2.30
Aluminum, 98-99%, [3,4,6], c.l...lb. .15 - —
l.c.l. .....lb. .16 - —
paste,[6] lining, extra fine, 200-lb. dms..lb. .56 - .60
ink, 150-lb. dm.....lb. .71 - —
standard, 200-lb. dm.....lb. .38 - —
powder,[6] lining, extra fine, 150-lb. dm..lb. .93 - —
litho, 150-lb. dm.....lb. .57 - —
standard, 200-lb. dm....lb. .59 - —
rubber compound, 200-lb. dm..lb. .40 - —
unpolished, standard, 250-lb. dm..lb. .36 - —
varnish, standard, 300-lb. dm..lb. .40 - —

Aluminum powder and paste prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. for 30-lb. dm., 3c. per lb. for 10-lb. can, and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,000 lbs., and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier, transportation rate will be made from sellers' invoice on orders of 200 lbs. or over.

Ambergris, gray, tins.....oz.17.00 -18.00
Aminomethylpropanol, dms., wks., lb. .50 - —
5 and 10-gal. cans, works..lb. .60 - —
Aminopyrine, 100-lb. dms.....lb. 4.00 - —
5-lb. bots.....lb. 4.25 - —
Ammonia,[6] anhydrous, fertilizer, f.o.b. Belle, W. Va., frt. equal with Hopewell, Va..ton.90.00 - —
refrigeration, tanks, works.lb. .05 - —
pure, cycls., divd., Met., N.Y., lb. .16 - —

Anhydrous ammonia in cylinders is quoted on a naltonwide schedule of delivered and stock point prices in all States.

Aqua, 26°, cbys.....lb. .03¼- —
dms, c.l.....lb. .02¼- —
l.c.l. .....lb. .02½- —
tanks (on NH_3 content), f.o.b. works..lb. .04 - —

Ammonia, benzoate, USP, dms., kgs., 4,000 lbs. or more, lb. 1.06 - —
1,000 lbs. to 3,900 lbs.....lb. 1.07 - —
900 lbs. or less.....lb. 1.10 - —
Bicarbonate, dms., divd. Met., N. Y..lb. .0664- .0614
Bichromate, bbls. .....lb. .30 - .32
Bifluoride, bbls. .....lb. .16 - .18
Borate, bbls., kgs.....lb. .15 - .16
Bromide, gran., bbls.....lb. .31 - .35
bxs. .....lb. .34 - .38
kegs .....lb. .32 - .36
Carbonate, lump, dms., divd., Met. N.Y..lb. .06¼- .06¾
cns., same basis.....lb. .14¼- —
powdered, 1c. per lb. higher.
Chloride, tech. (see Ammoniac, sal).
USP, gran., 225-lb. bbls....lb. .10 - —
100-lb. kgs.....lb. .13 - —
Citrate, 250-lb. bbls.....lb. .75 - —
100-lb. dms.....lb. .80 - —
50-lb. dms.....lb. .82 - —
25-lb. dms.....lb. .84 - .85
Fluoride, bbls. .....lb. .18 - .20
Hydroxide (see Ammonia, aqua).
Hypophosphite, dms.....lb. 1.25 - 1.27
jars .....lb. 1.35 - —
Iodide, 5-lb. bots.....lb. 3.71 - —
jars .....lb. 3.65 - —
Linoleate, 50%, anhyd., bbls.lb. .12 - —
Molybdate, kgs., works.....lb. 1.05 - 1.20
Nitrate, tech., bgs., works.... 100 lbs. 4.35 - —
bbls., works.....100 lbs. 4.55 - —
Oleate, dms.....lb. .14 - —
Oxalate, neutral, powd., bbls., kgs..lb. .23 - .29
Perchlorate, kgs. .....lb. .55 - .65
Persulphate, kgs., dom.....lb. .25½- .28½
Phosphate, dibasic, NF V, bls. lb. .37 - —
kgs. .....lb. .39 - —
tech., bbls.,c.l.....lb. .07¼- —
l.c.l. .....lb. .08¼- .09¼
monobasic, crude (fert. grade), 11% N., 48% phos., bulk, f.o.b. E. works..unit-ton. No prices
pure, bbls.....lb. .40 - .45
tech., bbls., c.l.....lb. .07¼- —
l.c.l. .....lb. .08¼- .09¼
Salicylate, USP, kgs.....lb. 1.15 - 1.20
Silicofluoride, bbls.....lb. .15 - .18
Stearate, anhydrous.....lb. .24½- —
paste .....lb. .06½- —
Sulphamate, 6 bbls., or more, works..lb. .18 - —
2 to 5 bbls., works.....lb. .20 - —
single bbls., works.....lb. .24 - —
smaller lots, works.....lb. .29 - —
Sulphate,[1] dom., bulk, f.o.b. cars at any one of 45 inland producing ovens..ton.28.20 - —
f.o.b. cars, at any one of 21 Atlantic Coast ports, ton.29.20 - —
Sulphide, liquid, 40-45%, basis 100%, dms., c.l., works..lb. .07½- —
l.c.l., divd.....lb. .15 - —
tanks, divd.....lb. .07½- —
red, 48%, cbys., works.....lb. .08 - —
dms., works.....lb. .06 - —
yellow, 33%, cbys., works..lb. .08 - —
dms., works.....lb. .06 - —
Sulphocyanide, CP, dms....lb. .45 - .55
tech., kgs.....lb. .40 - —
Ammoniac, gum (see Gum, ammoniac).
sal, gray, dom., bbls., c.l., 100 lbs. 5.50- 5.75
l.c.l. .....100 lbs. 6.00 - 6.70
white, gran., dom., bbls., c.l., works...100 lbs. 4.45 - —
l.c.l., same basis...100 lbs. 5.15 - —
Amyl acetate, ex fusel oil, tech., dms., c.l., divd..lb. .14½- .17
l.c.l., divd.....lb. .15 - .17½
tanks, divd.....lb. .13½- .16
ex-pentane, dms., c.l., frt. alld. E. of Miss. R..lb. .15½- —
l.c.l., same basis.....lb. .16½- —
tanks, same basis.....lb. .14½- —
Alcohol (see Alcohol, amyl).
Butyrate, dms., 50 gal., returnable..lb. .75 - —
Caproate, cns.....lb. 2.75 - —
Chloride, mixed, tech., dms., c.l., works..lb. .07 - —
l.c.l., same basis.....lb. .08 - —
tanks, same basis.....lb. .06 - —
Ether, dms., c.l., works.....lb. .09½- —
l.c.l., works.....lb. .102 - —
tanks, works.....lb. .08½- —
Naphthalenes, mixed, crude, l.c.l., dms., works..lb. .14 - —
refd., l.c.l., dms., works..lb. .16 - —
Nitrite, bots.....lb. 1.80 - 1.85
Mercaptan, dms., l.c.l., works, lb. 1.10 - —
Oleate, dms., l.c.l., works...lb. .31 - —
Salicylate, 5-lb. bots.....lb. 1.25 - 1.50
Stearate, dms., l.c.l., works..lb. .32½- —
Amylene, dms., c.l., works....lb. .10½- —
l.c.l., works.....lb. .11 - —
tanks, works.....lb. .09 - —
Anethol, bots.....lb. 2.35 - 2.40
cans .....lb. 2.25 - 2.30
Angelica root, dom., bls.....lb. .35 - 1.35
import, natural, bls.....lb. 3.25 - —
Angostura, bark, bls.....lb. .23 - .24
Aniline oil,[6] dms.....lb. .15 - —
l.c.l. .....lb. .16 - —
tanks .....lb. .12½- —
Salt, dms., works.....lb. .22 - .24
Anise,[1] Cyprus, bgs.....lb. .37½- .38
Ecuador, bgs.....lb. .34 - .35
Mexican, fair, bgs.....lb. .31 - .33
Spanish, bgs.....lb. .35½- .36
Star .....lb. .45 - .46
Turkish, bgs.....lb. .35 - .36
Anisic aldehyde, bots.....lb. 3.25 - 3.35
Annatto paste, bxs.....lb. .34 - .39
seed, bgs.....lb. .06 - .06½
Anthracene, 80-85%, bbls., works, lb. .55 - —
90%, bbls., works.....lb. .65 - —
Anthraquinone, 99.5%, subl., bbls., lb. .70 - —
Antimony butter (see Antimony chloride).
Chloride, solut., cbys.....lb. .17 - —
Metal,[3,4] bulk, c.l., works...lb. .14½- —
Needle, brown, Bolivian, 67%, lb. .18½- —
Chinese, black, 70%.....lb. .20 - .22
Oxide,[6] bgs., c.l.....lb. .15 - —
l.c.l. .....lb. .15½- —
Salt, 65%, bbls., divd. E. of Miss. River..lb. .40 - —
Sulphide, 65-70%, bbls., c.l., works..lb. .17 - —
l.c.l., works.....lb. .17½- —
Antipyrene, bbls., kgs., ton lots, lb. 2.00 - —
smaller lots.....lb. 2.10 - 2.20
Apomorphine, bots.....oz.23.20 -23.70
Archil extract, bbls.....lb. .26 - —
Areca nuts, powd., bbls.....lb. .25 - .26
Arecoline, hydrobromide, bots., oz.11.25 -11.50
Argols, test 70% to 85% basis, 100%, 100 kgm. purity, f.o.b. Spanish ports..100 kilos.105.00 - —
Argentine, f.o.b. N. Y.....kilo.132.00 -134.00
Arnica flowers, bls.....lb. 2.70 - 2.75
Root, bls.....lb 1.00 - 1.25
Arrowroot, St. Vincent, powd., bgs..lb. .09 - .09¼
bbls. .....lb. .09½- .09¾

Arsenic[6], metal, lump, cl.....lb. No prices
Chloride (arsenous), cns.....lb. 4.85 - —
Iodide (arsenous), 5-lb. bots..lb. 5.58 - —
jars .....lb. 5.45 - —
Red, import, cs.....lb. No prices
Trioxide (see Acid, arsenous).
Trisulphide, l.c.l., works.....lb. .30 - .35
White, powd., kgs., cl.....lb. .04 - —
l.c.l. .....lb. .04½- —
Asafetida, cs.....lb. .55 - .60
powd., bls., bxs.....lb. .80 - .85
Asbestine (see Talc, N. Y. fibrous).
Asbestos fiber, 5D and 5K, bgs., c.l. (20 tons), Canada, mines, ton.49.50 - —
5R, bgs., c.l. (20 tons), Canad. mines..ton.44.00 - —
6D, bgs., c.l. (30 tons), Canad. mines..ton.33.00 - —
7D, bgs., c.l. (30 tons), Canad. mines..ton.28.50 - —
7F, bgs., c.l. (30 tons), Canad. mines..ton.26.50 - —
7H, bgs., c.l. (30 tons), Canad. mines..ton.22.50 - —
7K, bgs., c.l. (30 tons), Canad. mines..ton.19.00 - —
7M, bgs., c.l. (30 tons), Canad. mines..ton.16.50 - —
7R, bgs., c.l. (30 tons), Canad. mines..ton.15.50 - —
Asphaltum, Manjak No. 10, crude, f.o.b. plant..lb. .05½- .12
process form, bgs., f.o.b. plant..lb. .05¾- .18
jet, bgs., 2,000 lbs., gross weight lots, bgs., f.o.b. Colorado shipping point.. ton.30.00 - —
Barbadoes, any quantity, f.o.b. Dunellen, N. J..lb. .10½- —
California, dms., c.l., f.o.b. N.Y., ton.35.00 - —
l.c.l., f.o.b. N. Y.....ton.40.00 - —
Cuban A, bgs., c.l., f.o.b. N.Y., ton.60.00 - —
l.c.l., f.o.b. N. Y.....ton.90.00 - —
B, bgs., c.l., f.o.b. N. Y..ton.35.00 - —
l.c.l., f.o.b. N. Y.....ton.55.00 - —
Egyptian, bgs., c.l., f.o.b. N.Y. lb. .12 - —
l.c.l., f.o.b. N. Y.....lb. .15 - —
Gilsonite, brilliant black, selects, 340 F. fusing point, bgs., gross weight, f.o.b. western shipping points....ton.32.00 - —
seconds, 370-390 F. fusing point, not uniform, same basis .....ton.25.50 - —
brilliant, selects, 290-295 F. fusing point, same basis. ton.30.50 - —
270 F. fusing point, same basis .....ton.30.50 - —
seconds, 300-330 F. fusing point, not uniform, same basis .....ton.25.50 - —
jet, 2,000 lbs., gross weight lots, bgs., f.o.b. Colorado shipping point..ton.30.50 - —
Mexican, Texas, dms., c.l., refinery..ton.21.00 - —
l.c.l., refinery.....ton.21.00 -23.00
tanks, refinery.....ton.16.00 - —
Atropine, bots.....oz.24.50 - —
Sulphate, bots.....oz.18.75 - —

B

Balm of Gilead buds, bgs.....lb. .70 - .80
Barbasco root (see cube root).
Barberry bark, bgs.....lb. .75 - .80
Tree bark, bls.....lb. No stocks
Barbital, cs, dms.....lb. 3.50 - 3.60
sodium, cs.....lb. 3.75 - —
Barium carbonate, natural, 99% thru 200 mesh, bgs., c.l., works..ton.43.00 - —
precip., bgs., c.l., works..ton.55.00 - —
l.c.l., works.....ton.60.00 - —
bbls., c.l., works.....ton.60.00 - —
l.c.l., works.....ton.65.00 - —
sulphur-free, c.l., works..ton.60.00 - —
l.c.l., works.....ton.65.00 - —
Chlorate,[6] kgs.....lb. .60 - —
Chloride, CP, cryst., bbls.....lb. .25 - .27
pure, bbls., kgs.....lb. .10 - .12
tech., dom., cryst., Zone 1, bgs., c.l. divd..lb.77.00 - —
l.c.l., divd.....lb.90.00 - —
bbls., c.l., divd.....lb.70.00 - —
l.c.l., divd.....lb.92.00 - —
Zone 2, bgs., c.l., divd..lb.81.00 - —
l.c.l., divd.....lb.94.00 - —
bbls., c.l., divd.....lb.83.00 - —
l.c.l., divd.....lb.96.00 - —
Zone 3, bgs., c.l., divd..lb.87.00 - —
l.c.l., divd.....lb.100.00 - —
bbls., c.l., divd.....lb.89.00 - —
l.c.l., divd.....lb.102.00 - —
Zone 4, bgs., c.l., divd..lb.83.00 - —
l.c.l., divd.....lb.97.80 - —
bbls., c.l., divd.....lb.88.00 - —
l.c.l., divd.....lb.99.80 - —

Barium chloride, technical, zones are as follows: Zone 1, New England States, N. Y., N. J., Pa., Md., Va., Ohio, Mich., Ind., Ill., Wis., Ky., and principal cities on west bank of Miss. R., north of Miss., north of Ark., line.

Zone 2, Tenn., No. and So. Carolina, Ga., Ala., Miss., and Fla. Zone 3, Minn., Ia., Mo., Col., N. Mex., Idaho, Utah and Ariz. Zone 4, Wash., Ore., Calif., and Nev.

Dioxide, dms., c.l., works...lb. .10 - —
l.c.l., same basis.....lb. .12 - .13
Fluoride, bbls.....lb. .18 Nom.
Hydrate (see Hydroxide).
Hydroxide, bbls., works.....lb. .06 - .07
Iodide, bots.....lb. 4.77 - —
jars .....lb. 4.62 - —
Monoxide (see Oxide).
Nitrate, cks.....lb. .11 - .12
Oxide, ungrd., dms., c.l., works, lb. .08 - —
l.c.l., same basis.....lb. .10 - .12
grd., dms., l.c.l., works....lb. .11 - .15
Peroxide (see Dioxide).
Silicofluoride, bbls.....lb. .17 - .19
Stearate, ctns. (50 lbs. each), ton and car-load lots..lb. .31 - —
less than ton lots.....lb. .32 - —
Sulphate, tech. (see Barytes and blanc fixe).
X-ray, bbls.....lb. .09½- .10
kgs. .....lb. .12 - —
Barytes, dom., floated, bbls., c.l., St. Louis..ton.27.65 - —
l.c.l., same basis.....ton.28.65 - —
ex whse, N.Y.....ton.36.00 - —
paper bags, c.l., St. Louis, ton.25.35 - —
l.c.l., same basis.....ton.26.35 - —
ex whse., New York.ton.34.00 - —
Southern off color bgs., mines..ton.17.50 - —
95.75%, bgs., mines.....ton.18.00 - —
ore, bulk, mines.....ton. 8.00 - —
German .....ton. No prices
Italian .....ton. No prices

AN OPEN LETTER
to manufacturers affected by W.P.B. Order L-197

St. Regis Paper Company
TAGGART CORPORATION
230 Park Avenue
New York

October 29, 1942

If you produce any of the products listed in W. P. B. Limitation Order L-197, you may face the immediate necessity of obtaining a satisfactory container to replace steel drums.

The multiwall paper bag is used today by many chemical companies for packing a wide variety of their products. Multiple walls of strong kraft paper, supplemented by a special laminated sheet where necessary, make these bags resistant to chemical action and assure protection of your product against moisture vapor penetration.

The St. Regis Paper Company maintains a staff of trained packaging engineers. These men are equipped by knowledge and experience to study your product, recommend type of bag to fit into your plant operation and construction of bag to protect your product.

Our bag plants are located in all strategic industrial areas, and quick deliveries can be made. Our facilities are at your disposal so that we may move jointly to conserve steel for direct war uses, and still maintain the essential flow of chemical products.

The packaging problem faces all industry today. Metal must be conserved. The St. Regis organization is able and anxious to help. We suggest that you wire or phone this office. The response will be prompt.

Very truly yours,

ST. REGIS PAPER COMPANY

R K Ferguson

President

RKF:LR

Baltimore, Md.
Birmingham, Ala.
Chicago, Ill.
Dallas, Tex.
Denver, Colo.
Franklin, Va.

MULTIWALL
St. Regis PAPER BAGS
MULTIPLY PROTECTION • MULTIPLY SALEABILITY

Los Angeles, Calif.
Nazareth, Pa.
New Orleans, La.
San Francisco, Calif.
Seattle, Wash.
Toledo, Ohio

St. Regis Specialized Service may be able to help you!

Bauxite,[4] bulk, mines.....ton. 7.00 -10.00
Bay leaves (see Laurel leaves).
Bay rum, bbls.....gal. 1.40 - 1.50
Bayberry bark, bgs.....lb. .12 - .13
Belladonna leaves, bls.....lb. 1.85 - 1.90
Root, bls.....[1]lb. 1.35 - 1.40
Bentonite, 200 mesh, bgs., Wyo., works..ton.11.00 - —
325 mesh, bgs., Wyo., works. ton.16.00 - —
Benzaldehyde, tech., cbys., dms.. lb. .45 - .55
NF VI, dms., 50 to 100 lbs...lb. .85 - —
5 to 25 lbs.....lb. .90 - —
Benzene (see Benzol).
Benzidin base, bbls.....lb. .70 - —
Benzocaine, cns.....lb. 3.00 - 4.00
Benzol,[3,6] 90%, dms., returnable. works..gal. .20 - —
tankcars, frt. alld. up to 2c. per gal..gal. .15 - —
W. Coast, f.o.b. Minnequa, Colo..gal. .15 - —
Benzophenone, dms.....lb. 1.15 - 1.20
Benzoyl chloride, cbys.....lb. .23 - .28
Peroxide, pure, gran., fib. otns., works..lb. 1.95 - —
Benzyl acetate, f.f.c., cns.....lb. .59 Nom.
dms.....lb. .55 Nom.
Alcohol (see Alcohol, benzyl).
Benzoate, a.m.s., f.f.c., dms..lb. 2.50 - —
Chloride, cbys., frt. equald...lb. .22 - .24
Cinnamate, cns.....lb. 5.50 Nom.
Formate, cns.....lb. 3.50 - 3.75
Isoeugenol, bots.....lb. 9.50 - —
Propionate, bots.....lb. 4.00 - —
Salicylate, bots.....lb. 2.50 - —
Benzylidineacetone, bots.....lb. 3.00 - 3.25
Berberine bisulphate, cns.....lb.22.50 -23.50
Hydrochloride, cns.....lb.22.50 -23.50
Sulphate, cns.....lb.22.50 -23.50
Berberis root, bls.....lb. .13 - .14
Betanaphthol, sublim., kgs.....lb. .55 - —
tech., bbls., c.l., works.....lb. .23 - —
l.c.l., bbls., works.....lb. .24 - —
Benzoate, fib. dms.....lb. 1.75 - —
Salicylate, dms.....lb. 5.00 - —
Betanaphthylamine, tech., kgs.lb. .51 - —
Beth root, bls.....lb. .33 - .35
Bismuth chloride, 5-lb. bots...lb. 3.00 - —
jars.....lb. 2.85 - —
Citrate, USP, VIII, 5-lb. bots.. lb. 2.86 - —
jars.....lb. 2.75 - —
Hydroxide, 5-lb. bots.....lb. 3.46 - —
cns.....lb. 3.35 - —
Metal, ton lots.....lb. 1.25 - —
Nitrate, cryst., 5-lb. bots....lb. 1.45 - —
cns.....lb. 1.30 - —
Oxychloride, 5-lb. bots.....lb. 3.10 - —
cns., kgs.....lb. 3.10 - —
Subbenzoate, 5-lb. bots.....lb. 3.51 - —
fib. dms.....lb. 3.40 - —
Subcarbonate, bots., cns.....lb. 1.59 - 1.65
175-lb. bbls.....lb. 1.50 - —
X-ray, 5-lb. bots.....lb. 2.79 - —
fib. dms.....lb. 2.73 - —
Subgallate, bots, cns.....lb. 1.49 - 1.53
fib. dms.....lb. 1.40 - —
Subiodide, bots.....lb. 4.24 - —
fib. dms.....lb. 4.13 - —
Subnitrate, powd., bots., cns.lb. 1.20 - 1.25
250-lb. bbls.....lb. 1.20 - —
Subsalicylate, 60-66%, bots..lb. 2.59 - —
bbls., fib. dms.....lb. 2.50 - —
Sulphocarbolate, 5-lb. bots...lb. 3.76 - —
fib. dms.....lb. 3.65 - —
Trioxide, powd., 5-lb. bots...lb. 3.76 - —
cns.....lb. 3.65 - —
Bismuth ammonia, citrate, USP, powd., 25-lb. dms..lb. 3.40 - —
5-lb. cns.....lb. 3.45 - 3.50
Black,[8] acetylene, imp., c.l., works, duty paid..lb. .14 - —
Bone, 1A, c.l.....lb. .17 - —
l.c.l.....lb. .17½ - —
2, c.l.....lb. .13 - —
l.c.l.....lb. .13½ - —
3, c.l.....lb. .12 - —
l.c.l.....lb. .12½ - —
4, c.l.....lb. .11 - —
l.c.l.....lb. .11½ - —
5, c.l.....lb. .05½ - —
l.c.l.....lb. .09 - —
6, c.l.....lb. .05½ - —
l.c.l.....lb. .09 - —
7, c.l.....lb. .11½ - —
l.c.l.....lb. .12 - —
8, c.l.....lb. .12½ - —
l.c.l.....lb. .13 - —

Bone black prices are for barrels or bags, freight allowed East. Pacific Coast prices are 1½c. per lb. higher, ex dock or ex whse.

Carbon, regular, uncompressed, bgs., c.l., f.o.b. plants..lb. .03625- —
l.c.l., bgs. or cartons, f.o.b. whse..lb. .08 - —
dlvd.....lb. .08 - —
beads, compressed, bgs., c.l., f.o.b. plants..lb. .03550- —
l.c.l., bgs. or cartons, f.o.b. whse..lb. .07½- —
dlvd.....lb. .07½- —
Charcoal (see C).
Graphite (see G).
Iron oxide, magnetic, pure, bbls., l.c.l., works..lb. .06½- —
Lamp, dom., 1, ctns., c.l., works..lb. .07½- —
l.c.l., works.....lb. .09 - —
2, ctns., c.l., works.....lb. .10 - —
l.c.l., works.....lb. .11 - —
2A, ctns., c.l., works.....lb. .11 - —
l.c.l., works.....lb. .12 - —
3, ctns., c.l., works.....lb. .14½- —
l.c.l., works.....lb. .15½- —
4, ctns., c.l., works.....lb. .16½- —
l.c.l., works.....lb. .17½- —
5, ctns., c.l., works.....lb. .19½- —
l.c.l., works.....lb. .20 - —
6, ctns., c.l., works.....lb. .26½- —
l.c.l., works.....lb. .27½- —
7, ctns., c.l., works.....lb. .37½- —
l.c.l., works.....lb. .40 - —
Mineral, vine type, bbls., l.c.l., f.o.b., works..lb. .0434- —
Vine, A, bbls., works or N. Y. lb. .04½- .05
B, bbls., works or N. Y....lb. .05½- —
kegs, f.o.b. N.Y.....lb. .06 - —
dms., c.l., frt. alld.....lb. .09½ Nom.
Black dyes are listed under Dyes.
Black Haw root bark, bls.....lb. .40 - .45
Tree bark, bls.....lb. .20 - .21
Black Indian hemp root, bls..lb. .20 - .26
Blanc fixe, dry, by-product, bgs., c.l., works..ton.60.00 - —
l.c.l., works.....ton.67.50 - —
direct process, bgs., c.l., f.o.b. Huntington, W.Va.ton.70.00 - —
bbls., same basis....ton.75.00 - —
l.c.l., same basis.....ton.75.00 - —
bbls., same basis.....ton.80.00 - —
pulp, 66⅔%, bbls., c.l., works. ton.40.00 - —
l.c.l., works.....ton.46.50 - —
Bleaching powder,[5,6] dms., c.l., works..100 lbs. 2.25 - 2.10
l.c.l., works.....100 lbs. 2.50 - 2.35
Blood, dried, dom., 16-16½% ammon., bgs., f.o.b. N. Y.. unit-ton. 4.95 - —
high-grade, unground, 16-17% ammon., bulk, f.o.b. Chicago..unit-ton. 5.38 - —
import, bgs., c.i.f. ports, shipt..unit-ton. Nominal
soluble (see Albumen, blood).
Bloodroot, bls.....lb. .32 - .35
Blue,[2] alkali, toner, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. River, including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis. lb. .85 - .90

Alkali blue toner prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c.), Miss., N. C., S. C., Tenn., Tex. (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Bronze, bbls., same basis, contracts..lb. .38 - —
Celestial, bbls.....lb. .10 - .12
Chinese, bbls., same basis, contracts..lb. .36 - —
Cobalt[2] genuine, 1-kilo pkg..lb. 4.00 - —
Imitation (see Blue, ultramarine).
Copper, phthalocyanin, bbls., f.o.b. works, frt. alld. 3.50 - 3.75
Milori, bbls., same basis, contracts..lb. .36 - —
Molybdated, Victoria, same basis, contracts..lb. 3.15 - —
Peacock, same basis, contracts lb. .52 - —
Potash, dms., bbls., same basis, contracts..lb. .42 - —
Prussian, bbls., same basis, contracts..lb. .36 - —
Tungstated, peacock, kgs....lb. 4.00 - —
Victoria, kgs.....lb. 3.30 - —
Methyl violet, kgs.....lb. 2.10 - —
Ultramarine, dry or pulp, cobalt grades, bbls., works, frt. equald..lb. .23 - .27
jobbing grades, bbls., same basis..lb. .12 - .13
regular grades, bbls., same basis..lb. .17 - .27
Blue, ultramarine, dlvd. ex whse., is 1c. higher; Pac. Coast, ex whse., 2c. higher, 100-lb. bgs., 1c. above bbls.; 28-lb. boxes, 5c. above bbls.
Victoria ink toner, bbls., same basis alkali toner..lb. 1.33 - —
synthetic vehicle, bbls., same basis..lb. 1.93 - —
Blue dyes are listed under Dyes.
Blueflag root, bls.....lb. .20 - .30
Blue mass, USP, cns., tubs....lb. 1.67 - 1.84
powd., bots., cns., dms.....lb. 1.70 - 1.84
Bluestone (see Copper sulphate).
Blue vitriol (see Copper sulphate).
Bone, raw, dom., 4¼% ammon., 50% phos., bgs., f.o.b. Eastern works..ton.37.50 - —
same basis, Chicago.....ton.39.50 - —
steamed, dom., feeding grade, 1¼% ammon., 60% phos., bgs., f.o.b. Eastern works, ton.44.00 - —
f.o.b. Chicago, same basis..ton.43.00 - —
fertilizer grade, 3% ammon., 50% phos., bgs., f.o.b. Chicago..ton.35.00 -36.00
Eastern works, same basis..ton.37.50 - —
Phosphate, precip. (see Calcium phosphate tribasic, precip.).
Boneset beans, bls.....lb. .12 - .13
Borage flowers, bls.....lb. .40 - .95
Borax,[3] tech., 99½% gran., bulk, c.l., frt. alld..ton.41.50 - —
bgs., c.l., frt. alld.....ton.45.00 - —
ton lots, ex whse....ton.56.00 - —
less than ton lots, ex whse..ton.61.00 - —
bbls., c.l., frt. alld....ton.55.00 - —
ton lots, ex whse....ton.66.00 - —
less ton lots, ex whse.. ton.71.00 - —
powd., bgs., c.l., frt. alld.ton.50.00 - —
ton lots, ex whse....ton.61.00 - —
less than ton lots, ex whse..ton.66.00 - —
bbls., c.l., frt. alld....ton.60.00 - —
ton lots, ex whse....ton.71.00 - —
less than ton lots, ex whse..ton.76.00 - —
USP $15 per ton higher.
Bordeaux mixture, dms., c.l., dealers..lb. .11 - —
l.c.l., dealers, dms..lb. .11½- —

Bordeaux mixture prices are works or whse. basis, frt. alld. to dest., in lots of 90 lbs. and over, no trucking or freight allowance for works or warehouse pickups.

Brazilwood extract (see Hypernic).
Brimstone (see Sulphur).
Bromine, purif., cs., 1,000 lbs., frt. alld. E. of Rockies..lb. .25 - .30
single pkgs., same basis..lb. .30 - .35
Bromoform, USP, 100-lb. lots, bots..lb. 1.50 - —
cbys.....lb. 1.42 - —
Bromstyrol.....lb. 4.30 - 5.00
Bronze powder, aluminum (see A), Gold, litho, cns., dms., over 10 lbs..lb. .60 - .65
moulding, cns., dms., over 10 lbs..lb. .80 - 1.00
printing ink, cns., dms., over 10 lbs..lb. .55 - 1.20
radiator, cns., dms., over 10 lbs..lb. .45 - .50
Broomtops, bls.....lb. .15 - .18
Brown[3], iron oxide, pure, precip., cks., f.o.b. N.Y.....lb. .12 - —
Metallic, iron oxide, bbls., wks. lb. .02½- —
paper bgs., c.l., works....lb. .0235- —
Sap, crystals, dom., works...lb. .12 - —
powdered.....lb. .13 - —
Sienna, burnt, American, bbls., f.o.b. works..lb. .03¾- .05
Italian, Amer. replacement type, bbls., f.o.b. works. lb. .08¾- .10¾
raw, American, bbls., f.o.b. works..lb. .04 - .10
Italian, Amer. replacement type, bbls., f.o.b. works. lb. .08 - .10
Umber, American, bbls., works. lb. .03¾- —
Italian type, Amer. replacement, bbls., works..lb. .04¾- —
Turkey type, bbls., l.c.l., f.o.b. Boston, Bethlehem, Easton, Pa., N. Af..lb. .04¾- —
Brown, umber, Amer. Turkey-type, St. Louis, Chicago, Indianapolis, New Orleans..lb. .05½- —
Kansas City..lb. .06¾- —
Minneapolis..lb. .0535- —
Pittsburgh..lb. .05 - —
ex car, Los Angeles..lb. .05¾- —
Portland, San Francisco, Seattle..lb. .05½- —
ex whse, Los Angeles.lb. .05¾- —
Portland, San Francisco, Seattle..lb. .05¾- —
Vandyke, regular, bbls., l.c.l., works..lb. .09 - —
special.....lb. .12 - —
Brucine, 100 oz., cns.....oz. .35 - —
Sulphate, 100 oz., cns.....oz. .30 - —
Bryonia root, bls.....lb. .85 - .90
Buchu leaves, bls.....lb. .80 - .82
Buckthorn bark, true, bls....lb. .65 - .87
cut and sifted, bbls.....lb. .85 - .97
Berries, bgs.....lb. .85 - .90
Burdock root, bls.....lb. .37 - .38
Burgundy pitch, dom., dms...lb. .06 - —
Butane,[1] industrial grade, tanks, f.o.b. Group 3..gal. .03 - .03½
Butternut bark, bls.....lb. .08 - .09
Butyl acetate,[1] norm., dms., c.l., frt. alld..lb. .14½- .15¾
l.c.l., frt. alld.....lb. .15 - .16½
tanks, frt. alld.....lb. .13½- .14¾
secondary, dms., c.l., frt. pd. E. of Miss. R..lb. .09¼- —
l.c.l., same terms.....lb. .10 - —
tanks, same terms.....lb. .08½- —
Alcohol (see Alcohol).
Aldehyde, dms., c.l., works..lb. .15½- —
l.c.l., works.....lb. .16½- —
tanks, works.....lb. .14½- —
Carbinol, secondary, l.c.l., dms., works..lb. .60 - —
Chloride, normal, dms., c.l., works..lb. .32 - —
l.c.l., works.....lb. .35 - —
Ether (see under Ether).
Lactate, dms.....lb. .26½- —
Laurate, dms., works.....lb. .42 - —
Myristate, dms., works.....lb. .41 - —
Oleate, ref'd, dms., works...lb. .35 - —
tech., dms., works.....lb. .29 - —
Phenylacetate, dms.....lb. 2.00 - 2.25
Phthalate,[6] dms., frt. alld. E. of St. Louis..lb. .20½- .21½
Propionate, dms., dlvd.....lb. .16½- .17
tanks.....lb. .15½- —
Stearate, dms.....lb. .31 - —
Butyric ether, bots.....gal. 6.50 - 6.95
cns., works.....lb. .65 - .70
dms., frt. alld. Met. N. Y..lb. .60 - —

C

Cadmium, bromide, 25-lb. jars, 50 lbs. or more..lb. 1.65 - 1.68
single jars.....lb. 1.70 - —
5-lb. bots.....lb. 1.84 - 1.91
iodide, 5-lb. bots.....lb. 4.23 - —
25-lb. cans.....lb. 4.09 - —
Lithopone (see Yellow).
Metal,[1,4] pat., shapes, cs., dlvd..lb. .95 - —
ingots or sticks.....lb. .90 - —
Red (see Red).
Selenide (see Red).
Sulphite (see Yellow).
Caffeine,[6] 10,000 lbs. or more, 100-lb. dms..lb. 2.60 - —
25-lb. dms.....lb. 2.68 - —
10-lb. cns.....lb. 2.65 - —
2,000 lbs. or more, 100-lb. dms..lb. 2.65 - —
10-lb. cns.....lb. 2.70 - —
25-lb. dms.....lb. 2.68 - —
1,000 lbs. or more, 100-lb. dms..lb. 2.70 - —
25-lb. dms.....lb. 2.73 - —
10-lb. cns.....lb. 2.75 - —
100 lbs. or more, 100-lb. dms., lb. 2.80 - —
25-lb. dms.....lb. 2.83 - —
10-lb. cns.....lb. 2.85 - —
less than 100 lbs., 10-lb. cns. lb. 3.15 - —
Citrated, bots.....lb. 2.30 Nom.
Hydrobromide, bots.....lb. 5.29 - 5.37
Calabar beans, bgs.....lb. .35 - .40
Calamus root, peeled, NF, cs., bleached, bls.....lb. No stocks
dom., natural, bls.....lb. No stocks
Calcium acetate, bgs., dlvd..... 100 lbs. 3.00 - 4.00
Arsenate,[6] bgs., c.l.....lb. .07 - .08
l.c.l.....lb. .07½- .08½

Calcium arsenate prices are works or whse. basis, frt. alld. to dest. in lots of 90 lbs. or over; no frt. or truck allowances for plant or whse. pick-up.

Bromide, 100 lbs., works, frt. equald..lb. .65 - —
50 lbs., works.....lb. .67 - —
25 lbs., works.....lb. .70 - —
Carbide, dms., c.l., dlvd.100 lbs. 4.75 - —
l.c.l., f.o.b. warehouse.100 lbs. 4.85 - —
Carbonate (see Chalk and Whiting)
Chloride, flake, paper bgs. 77-80%, c.l., dlvd..ton.18.50 -35.00
l.c.l., 15 tons, dlvd...ton.21.50 -25.50
5-ton lots.....ton.23.50 -41.00
liquor, basis 40%, tanks, wks., ton. 7.50 - —
solid, dom., 73-75%, dms., c.l., dlvd..ton.18.00 -34.50
15 tons, dlvd.....ton.21.43 -25.45
5-ton lots.....ton.23.45 -40.95

Calcium chloride c.l. prices for flake in burlap paper-lined bags, $2.50 per ton over paper bags, and drums $3.50 per ton over paper bags.

CP, cryst., 100-lb. lots, bbls., jars..lb. .28 - —
smaller lots, bbls., jars, bots. lb. .29 - .39
Gluconate, USP, gran., 150-lb. lb. .52 - —
dms.....lb. .57 - .60
cns.....lb. .70 - —
Powd., 2c. per lb. lower.
Glycerophosphate, fib. dms., 1,000-lb. lots..lb. 1.28 - —
100-lb. lots.....lb. 1.40 - —
cns., 25 lbs.....lb. 1.65 - —
Hypophosphite, cns.....lb. .62 - .65
Iodide, bots., jars.....lb. 4.04 - 4.19
Lactate, USP, bbls., 200 lbs..lb. .27 - .28
Mandelate, dense, dms.....lb. 2.05 - 2.30
fluffy, dms.....lb. 2.05 - 2.30
Palmitate, bbls.....lb. .28 - .29
Pantothenate, dex., 100-gram bots..per gram. .50 - —
Phosphate, dibasic, precip., 38-40% P_2O_5, bgs., c.l.f. Atlantic ports, shipt. unit-ton. No prices
feeding grade, bgs., f.o.b. works..ton.75.00 - —
food grade, f.o.b. works, 10 bbls. or over..lb. .07 - .07¾
5 to 9 bbls., same basis, lb. .08 - .09
1 to 4 bbls., same basis, lb. .10 - —
medicinals, bbls.....lb. .11½- .12
dms.....lb. .12½- .18
Calcium, phosphate, monobasic, cryst., bgs., c.l., works, frt. equald..lb. .05¾- —
5 tons and over, bgs., same basis..lb. .06 - —
less than 5 tons, same basis..lb. .06½- —
tribasic, bbls., c.l., works..lb. .0635- —
l.c.l.....lb. .0705- .0785
Resinate, precip., bbls., ton lots. lb. .15 - —
smaller lots.....lb. .16 - —
Stearate, precip., c.l.....lb. .25 - —
ton lots.....lb. .26 - —
less than ton lots.....lb. .27 - .28
Sulphate (see Gypsum).
Sulphide, 70%, CaS, bgs., c.l., works..ton.46.00 - —
80% CaS, bgs., c.l., works.ton.51.00 - —
luminous, dom., tins, works, 100 lbs. 1.25 - —
Sulphocarbolate, 1,000-lb. lots, 200-lb. bbls..lb. .40 - —
Calendula flowers, bls.....lb. 3.25 - 3.30
Calomel,[3] bbls., fib. dms., kgs., 50 lbs. or more..lb. 2.95 - —
Camphor, natural, powd., cs...lb. .95 Nom.
slabs, cs.....lb. .95 Nom.
tablets, tins.....lb. 1.25 Nom.
synth., dom., tech., bbls., contract, 2,000 lbs. or more, works..lb. .39½- —
10 bbls. (1,500 lbs.).....lb. .42 - —
5 to 9 bbls.....lb. .42½- —
1 to 4 bbls.....lb. .43½- —
25 lbs. to 149 lbs.....lb. .45½- —
1 lb. to 24 lbs.....lb. .52½- —
USP, or import, gran., powd., bbls., 2,000-lb. lots..lb. .66½- —
1,000-lb. lots.....lb. .67½- —
smaller lots.....lb. .68½- —
tablets, 2,000-lb. lots....lb. .79½- —
1,000-lb. lots.....lb. .80½- —
smaller lots.....lb. .81½- —
Monobromate, bulk, 100-lb. lots, lb. 3.10 - —
25 to 50-lb. lots.....lb. 3.20 - 3.25
Canada balsam (see Fir, balsam).
Canary seed,[1] Argentine, bgs..lb. .08¾- .09¼
Mcrocco, bgs.....lb. .10 - .10½
Canella alba bark, bls.....lb. .29 - .30
Cantharides, Chinese, cs.....lb. 2.25 - 2.30
powd., bxs.....lb. 2.45 - 2.50
Russian, cs.....lb. 6.00 - 6.25
powd., bxs.....lb. 6.25 - 6.30
Capsicum (see Pepper, red).
Caraway seed,[1] Dutch, bgs....lb. 1.05 - 1.10
Morocco, bgs.....lb. .78 - .80
Syrian, whiskered, bgs.....lb. .57 - .58
Carbazole, 95%, dms., ton lots, works..lb. .70 - —
smaller quantities, works..lb. .80 - —
98%, dms., ton lots, works...lb. .75 - —
smaller quantities, works..lb. .85 - —
Carbinol, butyl, norm. (see Amyl alcohol, normal).
Diethyl, l.c.l., works.....lb. .60 - —
Dimethylethyl, l.c.l., works..lb. .60 - —
Isobutyl, dms., c.l., works...lb. .225 - —
l.c.l., same basis.....lb. .235 - —
tanks, same basis.....lb. .215 - —
Carbon bisulphide, 55-gal. dms., c.l., frt. alld. E. of Miss. R., N. of Ohio R..lb. .05 - —
l.c.l., same basis.....lb. .05¾- —
5-gal. dms., c.l., same basis, lb. .07 - .07½
l.c.l., same basis.....lb. .08 - .08½
Dioxide, cyls.....lb. .06 - .08
Tetrachloride,[1,3] Zone 1, 52½-gal. dms., c.l., frt. alld.. gal. .73 - —
l.c.l., frt. alld.....gal. .80 - —
5 or 10-gal. dms., c.l., frt. alld..gal. .97 - —
l.c.l., frt. alld.....gal. 1.07 - —
Zone 2, 52½-gal. dms., c.l., frt. alld..gal. .80 - —
l.c.l., frt. alld.....gal. .87 - —
Zone 2, 5 or 10-gal. dms., c.l., frt. alld..gal. 1.04 - —
l.c.l., frt. alld.....gal. 1.14 - —
Zone 3, 52½-gal. dms., c.l., frt. alld..gal. .94 - —
l.c.l., frt. alld.....gal. 1.00 - —
5 or 10-gal. dms., c.l., frt. alld..gal. 1.17 - —
l.c.l., frt. alld.....gal. 1.27 - —
Zone 4, 52½-gal. dms., c.l., gal. .83 - —
l.c.l.....gal. .90 - —
5 or 10-gal. dms.....gal. 1.07 - —
l.c.l.....gal. 1.17 - —

All prices on carbon tetrachloride are frt. alld. with the exception of Zone 4, in which case the prices indicated are based on f.o.b. cars, L. A., Cal.; S. F., Cal.; Portland, Ore., and Seattle, Wash. All packages are inclusive and not returnable. Zone 1 includes the following States:—Me., N. H., Vt., Mass., Conn., R. I., N. Y., N. J., Pa., Md., Del., Va., W. Va., N. C., Tenn., O., Ind., Mich., Ill., Wis., Minn., Ia., Mo., also the river towns of Burlington, Ia., and Kansas City, Kans. Zone 2 includes N. D., S. D., Neb., Kans., Okla., Ark., La., Miss., Ala., Ga., S. C. and Fla. Zone 3 includes that portion of Montana east of Billings and the States of Wyoming, Colo., N. M. and Texas. Zone 4 includes Wash., Idaho, Montana, Ore., Cal., Nev., Utah and Arizona.

Cardamom,[1] bleached, cs.....lb. 1.70 - 1.80
decorticated, cs.....lb. 1.55 - 1.60
green, Alleppey, bgs.....lb. 1.05 - 1.10
Ceylon, cs.....lb. 1.05 - 1.10
Carob bean flour (see Gum, Locust bean).
Carvol, bots.....lb.22.50 -23.50
Cascara sagrada bark, bulk....lb. .26 - .28
Case-hardening mixture, 30% lump, dms., l.c.l. .09 - —
Casein, dom., 20-30 mesh, bgs., c.l., dlvd..lb. .19 - .22
5 tons, works.....lb. .19½- .22¼
smaller lots, works.....lb. .19½- .22½
80-100 mesh, c.l., dlvd.....lb. .19½- .22½
5 tons, works.....lb. .19¾- .22¾
smaller lots, works.....lb. .20 - .23
Import, Argentine, 20-30 mesh, bgs., c.l., c. and f..lb. .07½ Nom.
French, 30 mesh, bgs., c.l., duty paid..lb. No prices
New Zealand, 20-30-mesh, c.l., bgs., duty paid..lb. No prices
Cassia,[1] Batavia, No. 1, thin quill, bls..lb. .63 - .64
No. 1, regular, bls.....lb. .58 - .59
Shortstick, bls.....lb. .53 - .54
broken, bls.....lb. .51 - .52
China, buds, bgs.....lb. .53 - .54
rolls, select, bls.....lb. .51 - .52
broken, bls.....lb. .48 - .49
Saigon, all medium, bls.....lb. .62 - .63
all thin, bls.....lb. .62 - .63
Cassia fistula, bskts.....lb. .25 - .26
Castoreum, nat., cns.....lb.12.50 -15.00
Synth., bots.....lb.19.00 - —
Castor beans, f.o.b. Brazilian ports..long ton.75.00 - —
Oil (see Oil, castor).
Pomace,[1] dom., guaranteed 5½% ammon., bgs., c.l., works. ton.19.00 - —
Import, bgs., c.i.f. ports, shipment..ton. No prices

Catechol, resublimed, frt. alld. E. of Miss., 100-lb. dms.	lb.	3.50	- —
Celery seed,[1] French, bgs.	lb.	.28	Nom.
Indian	lb.	.28½	- .29
Celluloid scrap (see Pyroxylin scrap).			
Cellulose, acetate, flake, frt. alld.	lb.	.30	- .35
granules, frt. alld.	lb.	.35	- —
Triacetate, flake, frt. alld.	lb.	.30	- —
Cerium hydrate, dms., works.	lb.	.60	- —
oxalate, USP, bbls., works.	lb.	.35	- —
kgs. works	lb.	.37	- —
Chalk, precip., papermakers, bgs., c.l. works.	ton.	32.50	- —
rubbermakers bgs., c.l., works,	ton.	30.00	- —
other industries, and paints, bgs., c.l., works.	ton.	40.00	- —
drugs, dentifrices and cosmetics., c.l., spot.	lb.	.02½	- —
Chamomile flowers, Hungarian type, cs.	lb.	.54	- .65
Roman, bls.	lb.	3.25	Nom.
Charcoal, softwood, gran., bgs., c.l., dlvd., Ala., Del., Ga., Ky., Md., Miss., N. J., N. Y., N. C., S. C., Tenn., Ga., W. Va.	ton.	35.40	- —
Conn., Me., Mass., N. H., R. I., Vt.	ton.	35.90	- —
Ill., Ind. Iowa, Mich., Minn., Mo., Neb., O. and Wis.	ton.	32.50	- —
Penn.	ton.	34.80	- —
Willow, powd., bbls.	lb.	.06	- .07
Chestnut extract, clarif., 25% tan., bbls., c.l., works.	lb.	.0275	- —
tanks, works	lb.	.0225	- —
Chillies (see Pepper, red).			
China clay, dom., dry-grd., air-float, 90.75%, 300 mesh., bgs., c.l., works.	ton.	9.50	- —
l.c.l., works	ton.	16.00	- —
bulk, c.l., works	ton.	7.60	- —
200 mesh, bgs., c.l., wks.,	ton.	8.50	- —
l.c.l., works	ton.	9.50	-16.60
wet grd., silk-bolt., 99.9%, 325 mesh, bulk., c.l., works.	ton.	9.50	- —
paper bgs., c.l., works.	ton.	12.50	- —
Import., white, lump, bulk, c.l., ex dock, Balto., Boston, Norfolk, Phila.,	ton.	19.00	-24.00
powd., bks., l.c.l., ex whse.,	ton.	41.00	- —
Chloral hydrate, jars, 1,000 lbs.	lb.	.98	- .96
500 lbs.	lb.	.96	- .98
100 lbs.	lb.	.98	- 1.00
25 lbs.	lb.	1.00	- 1.02
1-10 lbs.	lb.	1.05	- 1.07
dms., 1,000 lbs.	lb.	.90	- .92
500 lbs.	lb.	.93	- .95
100 lbs.	lb.	.95	- .97
Chlorinated rubber,[6] standard, 100 lbs. or more, works.	lb.	.32	- —
smaller lots.	lb.	.35	- —
Chlorine,[3,5,6] liquid, cyls., c.l., dlvd., N.Y.	lb.	.05¼	- —
contracts, dlvd. N.Y.	lb.	.05½	- —
l.c.l., dlvd. N. Y.	lb.	.07¼	- —
tanks, single units, works, frt. equald.	100 lbs.	1.75	- —
multiple units, 3 or over, works, frt. equald.	100 lbs.	2.00	- —
2, works, frt. equalized	100 lbs.	2.50	- —
1, works, frt. equalized	100 lbs.	3.00	- —
Chloroform, tech., 650-lb. dms.	lb.	.20	- —
100-lb. dms.	lb.	.22	- —
50-lb. dms.	lb.	.23	- —
USP, 650-lb. dms.	lb.	.30	- —
100-lb. dms.	lb.	.32	- —
50-lb. dms.	lb.	.33	- —
Chlorpicrin, com'l, 180-lb. cyls., frt. alld.	lb.	.80	- —
100-lb. cyls., frt. alld.	lb.	.82	- —
25-lb. cyls., ex-whse.	lb.	1.00	- —
1-lb. bots., case 2, ex-whse.,	lb.	1.25	- —
Chrome acetate, powd., 24%, bbls.,	lb.	.22	- —
solut., 8%, cs., bbls.	lb.	.07½	- —
7½%, cs., bbls.	lb.	.06½	- —
Cake, bulk, c.l., works.	ton.	16.00	- —
Ore, residue, paper bgs., c.l., works.	ton.	15.00	- —
Oxide (see Green, chrome).			
Trioxide (see Acid, chromic).			
Yellow (see Yellow, chrome).			
Chrysarobin, 5-lb. bot.	lb.	6.03	- 7.00
Cinchona bark, quill, USP, 10 in., medium, cs.	lb.	1.25	- 1.30
20 in., thick, cs.	lb.	No stocks	
20 in., medium, cs.	lb.	No stocks	
broken quill, red, bgs.	lb.	.19	- .20
yellow, bgs.	lb.	.19	- .20
Cinchonidine,* small, crys., cns., 100 ozs.	oz.	.82	+ .13½*
Sulphate, NF, cns., 100 ozs.	oz.	.53	+ .13½

* Cinchonidine buyers must pay a surcharge of 13½c. per oz. to cover present war-risk insurance, higher ocean freight rates and additional expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surcharge invoiced.

Cinchonine,[5] small cryst., cns., 100 ozs.	oz.	.62	+ .13½*
large cryst., cns., 100 ozs.	oz.	.60	+ .13½
Sulphate, NF, cns., 100 ozs.	oz.	.42	+ .13½

* Cinchonine buyers must pay a surcharge of 13½c. per oz. to cover present war-risk insurance, higher ocean freight rates and other expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surcharge invoiced.

Cinchophen, USP, 25-lb. fib. dms.	lb.	3.55	- 3.60
1 and 5-lb. bots.	lb.	3.70	- 3.80
100 lbs., dms.	lb.	3.50	- —
Cinnamic alcohol (see Alcohol, cinnamic).			
Cinnamon,[1] Ceylon, 2, bls.	lb.	.58	- .59
Citral, bots., cns.	lb.	4.95	- 6.00
Citrine ointment,[2] jars.	lb.	.98	- 1.00
Citronellal, bots., dms.	lb.	2.75	- 3.25
Citronellol, bots., dms.	lb.	6.00	- 7.00
Clove,[1] Zanzibar	lb.	.18¾	- .19¼
Clover tops, red, dom., bgs.	lb.	.24	- .25
Coaltar, coal-gas, crude, bbls., c.l., works.	bbl.	8.25	- —
l.c.l., works.	bbl.	8.75	- —
tanks, works.	gal.	.07½	- —
refd., bbls., c.l., works.	bbl.	8.75	- —
l.c.l., works.	bbl.	9.25	- —
tanks, works.	gal.	.08½	- —
water-gas, crude, dms., c.l., works.	dm.	8.25	- —
l.c.l., works.	dm.	8.75	- —
refd., dms., c.l., works.	dm.	9.25	- —
Cobalt acetate,[6] bbls., kgs., dlvd.	lb.	.83¾	- —
feed grade, 29% Co., 100 lbs.	lb.	1.25	- —

Cobalt salts, feed grade, quotations are f.o.b. Philadelphia, Cleveland, or New York.

Cobalt, carbonate,[6] powd., bgs., works.	lb.	1.58	- —
feed grade, 49.5% Co., 100 lbs.	lb.	1.85	- —
Chloride, kgs., works.	lb.	.87½	- —
feed grade, 24.5% Co., 100 lbs.	lb.	1.25	- —
Hydrate,[6] bbls.	lb.	2.04	- —
feed grade, 42% Co., 100 lbs.	lb.	2.25	- —
Linoleate, paste, 8%, dms.	lb.	.32	- .35
solid, 8½%, dms.	lb.	.44	- —
Nitrate, feed grade, 20.4% Co., 100 lbs.	lb.	1.25	- —
Oleate, bbls.	lb.	.44	Nom.
Oxide,[6] black, kgs.	lb.	1.84	- —
Phosphate, feed grade, 34% Co., 100 lbs.	lb.	1.75	- —
Resinate, fused A, bbls.	lb.	.15	- —
1% cobalt oxide, bbls.	lb.	.15	- —
2% cobalt oxide, bbls.	lb.	.16	- —
3½% cobalt oxide, bbls.	lb.	.18	- —
precip., dms., dlvd.	lb.	.38	- —
Sulphate,[6] dms.	lb.	.65	- —
feed grade, 21% Co., 100 lbs.	lb.	1.00	- —
Cobalt-Ammonium sulphate, 14% Co., 100 lbs.	lb.	.75	- —
Cocaine, hydrochloride, 100 ozs., cns.	oz.	9.75	- —
Cochineal, gray, bgs.	lb.	.37	- .38
Teneriffe, silver, bgs.	lb.	.38	- .39
Cocoa butter,[1] bulk, f.o.b. shipping point.	lb.	.25½	- —
Cocillana bark, bgs.	lb.	.21	- .22

Codeine, cns., 100 ozs.	oz.	11.70	- —
Hydrochloride, cns., 100 ozs.	oz.	10.50	- —
Phosphate, cns., 100 ozs.	oz.	9.00	- —
Sulphate, cns., 100 ozs.	oz.	9.50	- —
Codliver oil (see Oil, codliver).			
Cohosh root, black, bls.	lb.	.09	- .11
blue, bls.	lb.	.09	- .10
Colchicine, bots., cns.	oz.	38.00	-63.00
Colchicum seed, bgs.	lb.	No stocks	
Collodion, USP, dms., 325 lbs.	lb.	.19½	- .20½
cns., 30 lbs.	lb.	.23	- .29½
flexible, USP, dms., 325 lbs.	lb.	.21	- .22
cns., 25 lbs.	lb.	.25	- .31
Colocynth pulp, bls.	lb.	1.10	- 1.25
Colombo root, bls.	lb.	.10	- .11
Coltsfoot leaves, bgs.	lb.	.90	- 1.00
Condurango bark, bgs.	lb.	.14	- .15
Conium leaves, bls.	lb.	1.18	- 1.20
Copaiba, balsam, Para, cns.	lb.	.47	- .49
S.A., USP, cns.	lb.	.50	- .52
Copper acetate,[6] normal, bbls., dlvd.	lb.	.24	- —
smaller containers, dlvd.	lb.	.26	- —
Carbonate,[6] 52-54%, bbls.	lb.	.18	- .20½
Chloride,[6] anhyd., bbls.	lb.	.23½	- —
Cyanide,[6] tech., bbls.	lb.	.34	- .38
Iodide, bots.	lb.	5.15	- 5.19
Metal,[1,2,5] electrolytic	lb.	.12	- .12½
Nitrate, tech., cryst., bbls.	lb.	.16	- .18½
Oleate, precip., bbls.	lb.	.22½	- .29½
Oxide,[6] black, bbls., tons, works,	lb.	.19½	- .21
Red, com'l, kgs., f.o.b. N. Y.	lb.	.20	- .22
Resinate, precip., bbls.	lb.	.15½	- .16

Copper, sulphate,[6] 99%, cryst., bbls., c.l., f.o.b. works,	100 lbs.	5.15	- 5.50
l.c.l., 16-50 bbls., same basis,	100 lbs.	5.30	- 5.65
6-15 bbls., same basis	100 lbs.	5.40	- 5.75
1-5 bbls., same basis	100 lbs.	5.65	- 6.00
monohydrated, dms., c.l., dealers, f.o.b. works.	100 lbs.	9.20	- —
l.c.l., dealers.	100 lbs.	10.20	- —
Copperas, cryst., gran., bgs., c.l., works.	ton.	17.00	- —
bbls., c.l., works.	ton.	20.00	- —
l.c.l., 25 or over, works.	100 lbs.	1.55	- —
1-4, works.	100 lbs.	2.00	- —
bulk, c.l., works.	ton.	14.00	- —
Copra, Coast, shipment.	lb.	No prices	
Coriander seed,[1] Morocco, bgs.,	lb.	.11½	- .12
Indian, bgs.	lb.	.08½	- .10
Corn silk, bls.	lb.	.20	- .22
Corn sugar, tanners', chipped, bgs., c.l., dlvd.	100 lbs.	3.62	- —
slabs, bbls., c.l.	100 lbs.	3.54	- —
Syrup, 42°, bbls., c.l.	100 lbs.	3.69	- —
43°, bbls., c.l.	100 lbs.	3.74	- —
Corrosive sublimate,[6] cryst., dms., 50 lbs. or more.	lb.	2.20	- —
gran., powd., dms., 50 lbs. or more.	lb.	2.24	- —
Cottonroot bark, bls.	lb.	.13	- .14
Cottonseed, hull ash,[1] 32-36% pot-ash, bgs., dlvd.	unit-ton.	1.00	- —
meal, 8%, Southeast mills for November, dlvd.	ton.	37.00	-38.00

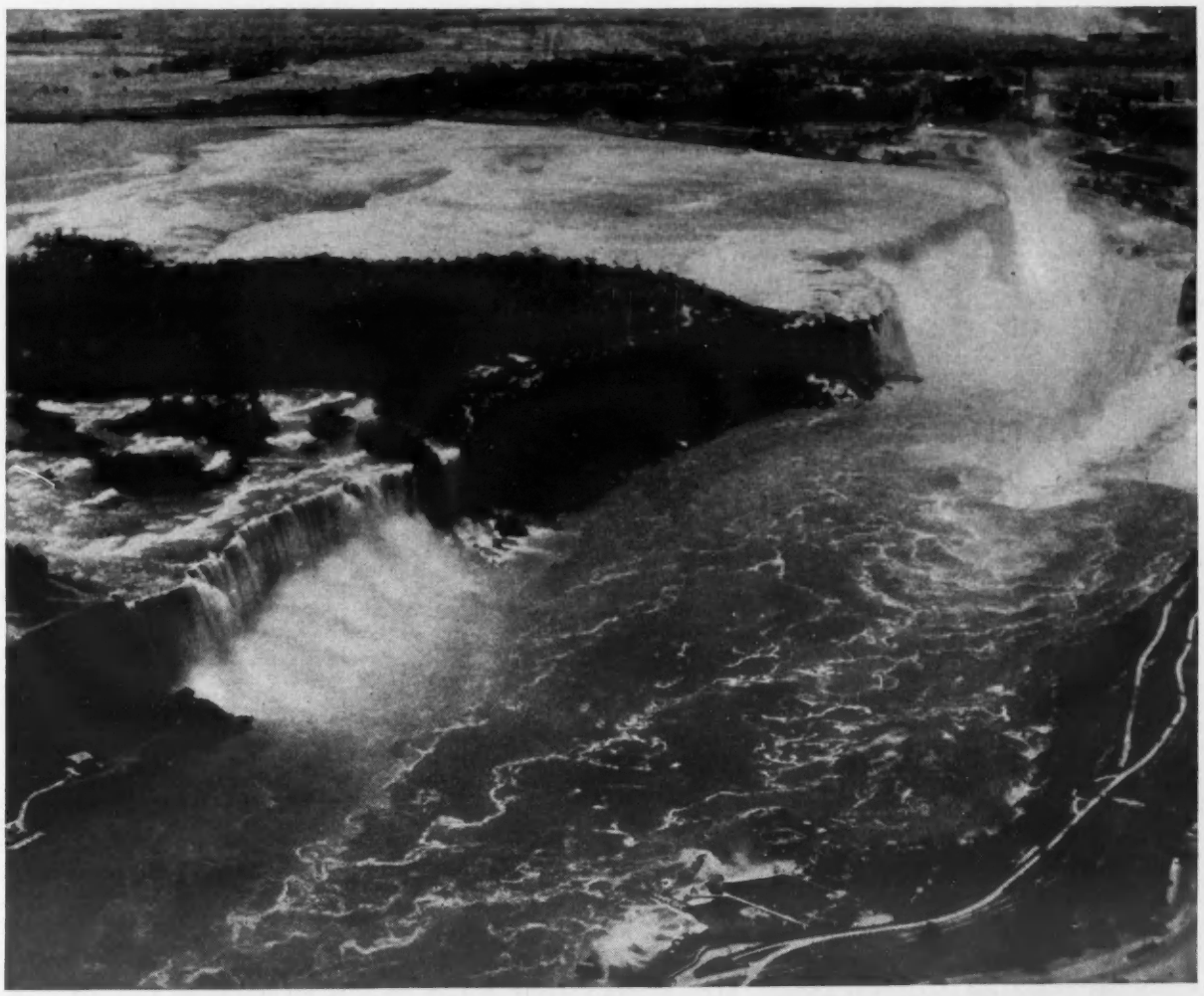
Shrine of GOOD WILL

Standing as it does between two great countries whose friendship has never been questioned, Niagara Falls is a perpetual reminder of the fact that nations can live and prosper side by side in peace and mutual respect. The beauty of this fact is commensurate with the beauty of the Falls themselves. Thus, Niagara today is considered by the people of the Americas as a shrine of good will . . . a constant expression of the desire of free men to respect the freedom of others.

So in the light of events, Niagara has become more than a scenic wonder . . . more than a trysting place of sentiment and romance . . . more, indeed, than a source of dynamic power in a power-driven age. It is a symbol of the simple, fundamental truths by which men and nations can live together—living proof that world democracy can be a basis for world peace.

We who work within sight and sound of Niagara Falls are devoting every ounce of our energies and facilities to speeding the flow of chemicals for Victory.

CAUSTIC POTASH · CAUSTIC SODA
PARA · CARBONATE OF POTASH
LIQUID CHLORINE



EBG Niagara ALKALI COMPANY
60 EAST 42nd STREET, NEW YORK, N. Y.

Coumarin, 25-lb. cns.....lb. 2.75 - —
1-lb. cns.....lb. 2.90 - —
1-oz. cns.....lb. 3.25 - —
less than 5, cns.....lb. 4.15 - 4.65
Cramp bark, NF, bls.....lb. .60 - .75
Cranesbill root, bls.....lb. .18 - .19
Cream of tartar, gran. or powd., bbls., 5,000 lbs. one shipm't. lb. .57½- —
smaller lots, bbls.....lb. .58 - —
kgs. .....lb. .58½- —
Creosote, beechwood, cbys., dms. lb. .80 - .85
bots. .....lb. 1.00 - 1.04
hardwood, USP, bots.....lb. .60 - .77
Pine, dms.....gal. .28 - —
Carbonate, bots., cbys.....lb. 2.10 - 2.5
Creosote oil, crude, tanks, works. gal. .15½- —
Coaltar, solution, tanks, works gal. .141 - —
refd., bbls., l.c.l., works.gal. .26 - —
tanks, works.....gal. .18 - .18½
Cresol,[6] USP, dms., c.l., works. lb. .10¾- —
l.c.l., same basis.....lb. .11¼- —
tanks .....lb. .10 - —
special resin grade, dms., c.l., works..lb. .09½- —
l.c.l., same basis.....lb. .10 - —
tanks .....lb. .08¾- —
Crotonaldehyde, 97%, 55 and 110 gals., l.c.l., works..lb. .15 - —
5 and 10-gal. dms., works..lb. .18 - —
Cryolite, syn., c.l., frt. alld. E. of Miss. River..lb. .08¼- —
l.c.l., works.....lb. .09¼- —
natural, c.l.....100 lbs. 8.75 - —
l.c.l. .....100 lbs. 9.25 - —
Cube root,[3] powd., 5% rotenone, bbls., f.o.b. N.Y.C..lb. .40 - .41
4% rotenone prices are 4c. per lb. less.
Cubeb berries, XX bgs.....lb. .75 - .85
powd., cs.....lb. .82 - .90
Culver's root, bls.....lb. .27 - .28
Cumin seed, Cyprus, bgs.....lb. .17½- .18
Morocco, bgs.....lb. .19 - .19½
Indian, bgs.....lb. .14 - .14½
Persian, bgs.....lb. .15¼- .15¾
Cutch, Borneo, extract, solid, contract, f.o.b. N. Y., duty paid..lb. None available.
Cyanamid,[3,6] fertilizer grade for mixing purposes, guaranteed 21% N, pulv., bgs., Niagara Falls, Ont., contracts..... unit-ton. 1.52½ Nom.
granular, fertilizer grade for mixing purposes, 20.6% N, bulk, Niagara Falls, Ont.unit-ton. 1.62½ Nom.
Cyanide-chloride, mixture,[6] 45%, gran., dms..lb. .10¾- ..
lump, dms.....lb. .09¾- —
75%, gran., dms.....lb. .15 - —
Cyclohexane, 98-100%, dms., wks. lb. .16 - —
Cyclohexanol, 98-100%, dms., wks. lb. .23 - —
Cyclohexanone, 98-100%, dms., works..lb. .32 - —
Cyclopropane, USP, cyls., divd.. gal. .27 - —

D

Damiana leaves, bls.....lb. .15 - .16
Dandelion root, bls.....lb. .32 - .33
Decanol, normal, tech., 360 lbs., dms., divd..lb. .35 - —
Deertongue leaves, bls.....lb. .18 - .19
Degras,[5] common, dom., bbls..lb. .12 - .12½
neutral, dom., bbls.....lb. .26 - .30
Derris root,[3] powd., 5% rotenone, bbls., f.o.b. N.Y..lb. .35 - —
4% rotenone prices are 4c. per lb. less.
Dextrin, British gum, c.l., f.o.b. Chicago..100 lbs. 4.25 - —
l.c.l., f.o.b. Chicago..100 lbs. 4.35 - —
Corn, canary, bgs., c.l., f.o.b. Chicago..100 lbs. 4.00 - —
l.c.l., f.o.b. Chicago..100 lbs. 4.80 - —
white, bgs., c.l., f.o.b. Chicago..100 lbs. 3.95 - —
l.c.l., f.o.b. Chicago..100 lbs. 4.15 - —
Potato, bgs., dom., c.l.....lb. .10 - —
l.c.l., bgs.....lb. .10¼- .11¼
Diacetone (see under Alcohol).
Diacetyl, bots.....lb. 9.50 -11.00
Diamyl ether (see Amyl Ether).
Phthalate,[6] dms., c.l., divd..lb. .22 - —
l.c.l., divd.....lb. .22½- —
tanks, divd.....lb. .21 - —
Diamyl sulphate, l.c.l., dms., works..lb. .25 - —
Diamylamine, dms., c.l., works..lb. .61 - —
l.c.l., works.....lb. .64 - —
Diamylene, dms., c.l., works..lb. .105 - —
l.c.l., works.....lb. .112 - —
tanks, works.....lb. .095 - —
Diamylnaphthalene, dms., l.c.l., works..lb. .17 - —
Diamylphenol (2, 4), dms., c.l., works..lb. .18 - —
l.c.l. .....lb. .21 - —
Diatomaceous earth, dom., natural, bgs., c.l., f.o.b. Pacific coast..ton. 22.00 -25.00
l.c.l., ex whse.....ton. 45.00 - —
purified, bgs., c.l., f.o.b. Atlantic seaboard..ton. 55.00 -59.00
l.c.l., ex whse.....ton. 85.00 -90.00
chemically pure, bgs., c.l., f.o.b. Atlantic seaboard..lb. .07 - —
l.c.l., ex whse.....lb. .10 - .16
Import, Algerian, bgs., c.l., c.l.f. ton. No prices
Mexican, white, bgs., c.l., c.l.f. lb. .02 - .03
l.c.l. .....lb. .04 - .06
Dibutylamine, dms., c.l., works. lb. .61 - —
l.c.l. .....lb. .64 - —
Dibutyl ether (see Ether, butyl).
Phthalate,[3,6] dms., c.l., divd.lb. .21 - —
l.c.l., divd.....lb. .21½- —
tanks, divd.....lb. .20 - —
cns., works.....lb. .23½- —
Dibutyl sebacate, dms., works.lb. .45 - .47
Tartrate, dom., dms.....lb. .92 - —
Diacalcium phosphate (see Calicum phosphate dibasic).
Dichlorethyl ether,[6] dms., c.l., works..lb. .15 - —
l.c.l. .....lb. .16 - —
tanks .....lb. .14 - —
Diethylamine ethanol, l.c.l., dms., works, frt. alld. E. of Miss. River..lb. .85 - —
Diethylaniiin, dms.....lb. .40 - —
Diethyl carbonate, com'l, dms.lb. .25 - —
refd., 99%, dms.....lb. .30 - —
Diethyl oxalate, dms., l.c.l., divd. lb. .33 - —
Phthalate,[6] dms., c.l., divd.lb. .22 - —
l.c.l. .....lb. .22½- —
tanks .....lb. .21 - —
Diethyl sulphate, dms., c.l., works, lb. .15 - —
l.c.l., works.....lb. .14 - —
tanks .....lb. .12 - —
Diethyleneglycol,[6] dms., c.l., works..lb. .14 - —
l.c.l., works.....lb. .15½- —
Monobutylether, dms., works.lb. .22½- .24½
Diethyleneglycol monoethylether, dms., c.l., works..lb. .14½- —
l.c.l., works.....lb. .15½- —
tanks, works.....lb. .13½- —
Digitalis leaves, dms.....lb. .45 - .50
Diglygol laurate, dms.....lb. .31 - .33
Oleate, light, bbls., c.l.....lb. .17 - —
Stearate, bbls., c.l.....lb. .22 - —
Di-isobutyl ketone, dms., works, lb. .19 - —
Dillseed, cleaned, bgs.....lb. .08½- .09
Dimethyl phthalate,[6] dms., c.l., divd..lb. .20 - —
l.c.l., divd.....lb. .20½- —
tanks, divd.....lb. .19 - —
Dimethylamine, dms., c.l., divd.lb. .85 - —
l.c.l., divd.....lb. .90 - —
Dimethylanilin, dms., c.l.....lb. .23 - —
l.c.l., dms.....lb. .24 - —
Dinitrobenzene, bbls., 80° min.lb. .18 - —
Dinitrochlorobenzene, dms.....lb. .14 - —
Dinitronaphthalene, kgs.....lb. .35 - .38
Dinitrophenol, bbls.....lb. .22 - —
Dinitrotoluene, dms.....lb. .18 - —
oily, dms.....lb. .05 - —
Diorthotoluolguanidin,[6] d m s., 2,000 lbs. or over, divd..lb. .44 - —
600-1,950 lbs., divd.....lb. .46 - —
150-450 lbs., divd.....lb. .47 - —
Dioxan, dms., c.l., frt. alld....lb. .20 - —
l.c.l., same basis.....lb. .21 - —
tanks, same basis.....lb. .19 - —
Dip oil (see Tar acid oil).
Dipentene, dms.....gal. .59 - .61
tanks .....gal. .51 - —
dest., dist., dms.....gal. .55 - .58
tanks .....gal. .45 - —
Diphenyl, bbls., c.l., works...lb. .15 - —
l.c.l., works.....lb. .16 - .20
Oxide, perfume grade, dms..lb. .43 - .45
cns. .....lb. .48 - .50
Diphenylamine,[6] bbls.....lb. .25 - —
Diphenylguanidin,[6] dms., 2,000 lbs. or over, divd..lb. .35 - —
600-1,950 lbs., divd.....lb. .36 - —
150-450 lbs., divd.....lb. .37 - —
Dimethylethyl carbinol (see Carbinol).
Divi-Divi, Colombian.....ton. 80.00 - —
Venezuelan .....ton. 80.000 - —
Doggrass root, imp. cut NF, bls., lb. .50 - 1.50
domestic, bls.....lb. .36 - .45
Dogwood bark, Jamaica, bls...lb. .07 - .09
Drovers powder, USP, cns...lb. 2.75 - 2.80
Dragon's blood, reeds, cs.....lb. .95 - 1.00
Dyes, coaltar (certified colors) for foods, drugs and cosmetics:—
Blue, FD&C blue, No. 1, cns..lb. 13.50 - —
FD&C blue, No. 2, cns....lb. 13.50 - —
Green, FD&C green, No. 2, cns. lb. 17.50 - —
FD&C green, No. 3, cns....lb. 27.50 - —
FD&C blue, No. 2, cns....lb. 13.50 - —
Orange, FD&C orange, No. 1, cns..lb. 2.90 - —
FD&C orange, No. 2, cns..lb. 3.65 - —
Red, FD&C red, No. 1, cns..lb. 6.00 - —
FD&C red, No. 2, cns.....lb. 3.15 - —
FD&C red, No. 3, cns.....lb. 17.50 - —
FD&C red, No. 4, cns.....lb. 5.75 - —
FD&C red, No. 32, cns....lb. 4.15 - —
drugs and cosmetics:—
Yellow, FD&C yellow, No. 1, cns..lb. 8.50 - —
FD&C yellow, No. 3, cns..lb. 2.65 - —
FD&C yellow, No. 4, cns..lb. 2.65 - —
FD&C yellow, No. 5, cns..lb. 3.15 - —
FD&C yellow, No. 6, cns..lb. 3.15 - —
Dyes, coaltar (certified colors), for drugs and cosmetics:—
Black, D&C black, No. 1....lb. 8.35 - —
Blue, D&C blue, No. 6.....lb. 13.50 - —
Brown, D&C brown, No. 1, cns., lb. 12.35 - —
Green, D&C green, No. 5, cns., lb. 12.35 - —
D&C green, No. 6, cns....lb. 12.35 - —
Orange, D&C orange, No. 3, cns..lb. 8.35 - —
D&C orange, No. 4, cns....lb. 15.35 - —
D&C orange, No. 10, cns...lb. 15.85 - —
D&C orange, No. 12, cns...lb. 17.35 - —
Red, D&C red, No. 5.....lb. 6.00 - —
D&C red, No. 17.....lb. 8.35 - —
D&C red, No. 18.....lb. 18.35 - —
D&C red, No. 19, cns.....lb. 15.35 - —
D&C red, No. 22, cns.....lb. 8.35 - —
D&C red, No. 33, cns.....lb. 13.35 - —
D&C red, No. 37, cns.....lb. 12.35 - —
Yellow, D&C yellow, No. 7, cns..lb. 8.35 - —
D&C yellow, No. 8, cns....lb. 8.35 - —
D&C yellow, No. 11.....lb. 10.35 - —
Dyes, coaltar (certified colors), for external use drugs and cosmetics:—
Blue, Ext. D&C blue, No. 1, cns..lb. 12.35 - —
Green, Ext. D&C green, No. 1, cns..lb. 12.35 - —
Red, Ext. D&C red, No. 1, cns..lb. 10.35 - —
Ext. D&C red, No. 3.....lb. 21.85 - —
Ext. D&C red, No. 8.....lb. 7.85 - —
Ext. D&C red, No. 10, cns.lb. 12.35 - —
Ext. D&C red, No. 13, cns.lb. 12.35 - —
Yellow, Ext. D&C yellow, No. 1, cns..lb. 8.35 - —
Dyes, coaltar, for general uses (numbers are those of Colour Index Scale):—
36 Chrome yellow 2G....lb. .65 - .70
40 Chrome yellow R.....lb. .50 - 1.00
53 Victoria violet.....lb. .80 - 1.00
165 Lake red C.....lb. .70 - .80
170 Fast red A[6].....lb. .56 - .60
180 Fast red VR.....lb. 1.50 - 1.60
189 Lake red R, paste....lb. .85 - .90
189 Lake red R, powd....lb. 3.00 - 3.10
Sulphur tan.....lb. .30 - .50
202 Chrome blue black U..lb. .35 - .42
204 Chrome black A.....lb. .42 - .45
208 Fast red blue R.....lb. .75 - 2.00
216 Chrome red B.....lb. 1.75 - 2.00
262 Cloth red 2B.....lb. .66 - .80
289 Fast cyanin 8R.....lb. .90 - 1.00
299 Chrome black F.....lb. .86 - .88
307 Fast cyanin black B..lb. .80 - .85
326 Direct cast scarlet....lb. 2.00 - 2.25
304 Paper yellow.....lb. .83 - .90
365 Chrysophenin G.....lb. .58 - .70
394 Direct violet N.....lb. .80 - .85
382 Direct scarlet B.....lb. 1.15 - 1.20
387 Direct violet B.....lb. 1.00 - 1.30
401 Developed black BHN, lb. .45 - .60
406 Direct blue 2B.....lb. .66 - .70
415 Direct orange B.....lb. .60 - .70
419 Direct fast red F....lb. .70 - .73
420 Direct brown M.....lb. .55 - .57
Dyes, coaltar, for general uses (numbers are those of Colour Index Scale):—
448 Benzo purpurin 4B....lb. .65 - .67
495 Benzo purpurin 10B..lb. .40 - .50
502 Direct azcrin G.....lb. .75 - .80
512 Direct blue RD.....lb. .80 - 1.00
518 Direct pure blue 6B..lb. 1.20 - 1.30
520 Direct pure blue.....lb. .50 - 1.00
529 Direct fast black FF.lb. .55 - 1.00
581 Direct black EW.....lb. .50 - .54
582 Direct black RX.....lb. .35 - .45
592 Direct green B.....lb. .50 - .55
594 Direct green G.....lb. .50 - .55
596 Direct brown 3GO....lb. .85 - 1.00
620 Direct yellow R.....lb. 1.25 - 1.50
698 Acid violet .....lb. 1.00 - 3.00
812 Primulin .....lb. .70 - .73
814 Direct fast yellow....lb. 2.00 - 2.25
845 Nigrosin (water soluble), lb. .35 - .50
1177 Indigo, 20 p.c. paste..lb. .15 - .18
Benzo fast black L..lb. .90 - 1.00
Sulphur black.....lb. .20 - .25
Sulphur blue.....lb. .45 - 1.00
Sulphur brown.....lb. .25 - .50
Sulphur maroon.....lb. .40 - —
Sulphur olive.....lb. .25 - .54
Sulphur yellow.....lb. .30 - .50
Zambesi black.....lb. .75 - .80
Dyes, coaltar, for stains, oil-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher; f.o.b. sellers' works or warehouse).
Black:—
865 Nigrosin derivatives.lb. .36 - .44
Blue:—
1075 Alizarin astrol base.lb. 15.00 - —
1078 Alizarin cyanin green base..lb. 6.00 - —
Brown:—
Brown .....lb. 1.15 - —
Green:—
1078 Alizarin cyanin green.lb. 5.00 - —
Green .....lb. .75 - —
Orange:—
24 Sudan I.....lb. .75 - —
Red shade .....lb. .75 - —
Red:—
75 Sudan II.....lb. 1.05 - —
258 Sudan IV.....lb. .95 - —
749 Rhodamine B (oil pink) lb. 2.50 - —
1080 Anthraquinone,[6] violet base..lb. 6.00 - —
680 Oil violet .....lb. .50 - —
Yellow:—
15 Amidoazobenzene yellow..lb. .90 - —
17 Amidoazotoluene yellow, lb. .75 - —
61 Yellow OB.....lb. 1.40 - 2.00
Dyes, coaltar, for stains, spirit-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher, f.o.b. sellers' works or warehouse).
Black:—
246 Naphthol blue black S.lb. .50 - —
873 Methylene gray.....lb. 1.50 - —
729 Victoria blue B.....lb. 1.85 - —
861 Indulin .....lb. .87 - —
909 New blue P.....lb. 1.30 - —
922 Methylene blue.....lb. 1.00 - —
1054 Alizarin saphirol B..lb. 1.90 - —
1180 Indigotin IA .....lb. .85 - —
Blue:—
714 Patent blue A.....lb. 1.05 - 1.10
Brown:—
234 Resorcin brown Y....lb. .65 - —
235 Resorcin dark brown R, lb. .66 - —
231 Bismarck brown G...lb. .47 - .62
332 Bismarck brown R...lb. .47 - .62
793 Phosphin .....lb. 4.65 - —
Green:—
5 Naphthol green B....lb. 1.00 - —
657 Malachite green.....lb. 1.35 - —
662 Brilliant green.....lb. 2.00 - —
666 Guinea green B.....lb. 1.15 - —
737 Wool green S.....lb. .58 - —
924 Methylene green B...lb. 1.55 - —
1078 Alizarin cyanin green.lb. 2.00 - —
Orange:—
10 Chrysoidin G.....lb. .44 - —
21 Chrysoidin R.....lb. .41 - —
27 Orange G.....lb. .50 - —
151 Orange Y.....lb. .31 - .33
161 Orange R.....lb. .34 - —
31 Amidonaphthol red G.lb. .42 - —
37 Amidonaphthol red 6B, lb. .68 - —
Red:—
79 Popceau R.....lb. .48 - —
88 Fast red B.....lb. 1.05 - —
176 Fast red A[6].....lb. .54 - —
179 Azorubin .....lb. .60 - —
183 Crocein scarlet 3BX..lb. .72 - .75
185 Cochineal red A.....lb. .60 - —
252 Brilliant crosein M...lb. .68 - —
677 Fuchsin .....lb. 2.10 - —
749 Rhodamine B.....lb. 3.50 - —
752 Rhodamine 6B.....lb. 4.50 - —
768 Eosin G.....lb. 1.50 - —
841 Safranin .....lb. 1.45 - —
Violet:—
680 Methyl violet B.....lb. .75 - —
681 Crystal violet C.....lb. 1.75 - —
695 Acid violet 4BN.....lb. .88 - —
Yellow:—
10 Naphthol yellow S....lb. .88 - —
138 Metanil yellow .....lb. .56 - .58
636 Fast light yellow....lb. 1.25 - —
639 Xylene light yellow...lb. 1.15 - —
640 Tartrazin .....lb. .80 - —
655 Auramine .....lb. 1.27 - —
Dyes, coaltar, for stains, water-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher, f.o.b. sellers' works or warehouse).
Black:—
864 Nigrosin .....lb. .36 - .44
Blue:—
260 Indulin .....lb. .60 - .70
Brown:—
331 Bismarck brown.....lb. 1.50 - —
Green:—
637 Malachite green base.lb. 2.00 - —
Orange:—
20 Chrysolin G.....lb. .95 - —
21 Chrysoldin R.....lb. .96 - —
Red:—
677 Fuchsin, magenta, base. lb. 7.25 - —
749 Rhodamine B.....lb. 4.75 - —
Yellow:—
67 Amidoazotoluene yellow, lb. .75 - —
655 Auramine .....lb. 2.00 - —
800 Chinolin yellow SS....lb. 2.00 - —
Violet:—
680 Methyl violet base....lb. .85 - —
Dyes, natural (see name of article).

E

Echinacea root, bls.....lb. .19 - .23
Egg albumen (see Albumen).
yolk, dried, dom., bbls....lb. 1.00 - 1.10
imported .....lb. 1.00 - 1.10
Elder flowers, bright, bls.....lb. .78 - .80
Elecampane root, bls.....lb. .18 - .19
Elm bark, grinding, bls.....lb. .14 - .15
powd., bbls., bxs.....lb. .20 - .21
select, bndls. .....lb. .19 - .20
Emetine hydrochloride, bots..oz. 33.00 -34.50
Ephedra, bls. .....lb. .21 - .22
Ephedrine, natural, USP, anhydrous, bots..oz. 1.15 - 1.65
hydrochloride or sulphate, tins .....oz. .95 - 1.45
synth, USP, hemihydrate, bots., 100 ozs. or more..oz. .65 - —
anhyd., bots., 100 ozs. or more..oz. .65 - —
hydrochloride, tins, 100 ozs. or more..oz. .50 - —
Sulphate, cryst., tins, 100 ozs. or more..oz. .48 - —
Epsom salt, tech., bgs....100 lbs. 1.80 - —
bbls. .....100 lbs. 1.90 - —
Epsom salt prices on technical and USP ars on the basis of freight equalized with Balto., Carteret, N. J., Chicago, Cincinnati, Cleveland, Houston, New Orleans, New York.
USP, cryst., dom., bgs., c.l., 100 lbs. 2.00 - —
l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 2.25 - —
smaller lots.....100 lbs. 2.50 - —
bbls., c.l.....100 lbs. 2.00 - —
l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 2.35 - —
smaller lots.....100 lbs. 2.60 - —
kgs., c.l. .....100 lbs. 2.35 - —
l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 2.60 - —
smaller lots.....100 lbs. 2.85 - —
dried, bgs., l.c. .....lb. .08 - .09
Ergot, USP, cns., dms.....lb. 1.40 - 1.45
Eserine, bots.....oz. No prices.
Salicylate, bots.....oz. 41.00 -48.00
Sulphate, bots.....oz. 41.00 -48.00
Ether, acetic (see Ethyl acetate).
Amyl (see Amyl, ether).
Butyl, l.c.l., divd.....lb. .30 - —
Ethyl (see Ether, sulphuric).
Nitrous, conc., bots., 100 lbs., lb. .93 - 1.10
Sulphuric, conc., 310-lb. dms., lb. .11 - —
27-lb. dms. .....lb. .15½- .16
USP, anesthesia, hospitals, 1-lb. cns..lb. .60 - .61
Synth., dms., c.l., works....lb. .14½- —
l.c.l., works.....lb. .15½- —
ttanks .....lb. .12½- —
Ethyl acetate,[3] 85-90%, dms., c.l., frt. alld..lb. .12 - .13
l.c.l., frt. alld.....lb. .12½- 13½
tanks, frt. alld.....lb. .11 - .12
98 98%, dms., c.l., frt. alld..lb. .12¼- .13¼
l.c.l., frt. alld.....lb. .12¾- .13¾
tanks, frt. alld.....lb. .11¼- .12¼
NF, 390-lb. dms. .....lb. .14½- .15½
Acetoacetate, dms., c.l., works, lb. .37½- —
l.c.l., frt. alld.....lb. .38 - —
Benzoate, bots.....lb. .90 - 1.00
Bromide, tech., dms.....lb. .50 - .55
Caproate, cns. .....lb. 1.30 - 1.40
Chloride, dms. .....lb. .18 - .20
Cinnamate, cns.....lb. 3.50 - 3.75
Formate, cns., dms.....lb. .27¾- —
Iodide, bots. .....lb. 3.50 - 3.60
Lactate, 55 gal. dms., works, lb. .33½- —
5-gal. dms., works.....lb. .37½- .39½
Myristate, dms., works.....lb. .55 - —
Oleate, dms., works.....lb. .47 - —
Oenanthate, dms. .....lb. .75 - 1.25
Oxalate, dms., frt. alld.....lb. .33 - —
Oxyhydrate, bots. .....gal. 7.50 - 8.00
Silicate, l.c.l., dms., works..lb. .77 - —
Vanillin, 25-lb. lots, cns....lb. 5.25 - —
5-lb. lots, cns.....lb. 5.30 - —
1-lb. lots, cns.....lb. 5.40 - —
Ethylcellulose,[3] std., pkgs., 5,000 lbs. or more, works..lb. .50 - —
less than 5,000 lbs., same basis..lb. .52 - .60
Ethylene, dichloride,[6] dms., c.l., works, E. of Rockies, frt. alld..lb. .0742- —
West of Rockies, same basis..lb. .0792- —
l.c.l., works, E. of Rockies, frt. alld..lb. .0795- —
West of Rockies, same basis..lb. .0841- —
Ethyleneglycol,[6] dms., c.l.....lb. .15½- —
l.c.l. .....lb. .16½- .19½
tanks .....lb. .14½- —
Monobutylether, dms., c.l., wks. lb. .16½- —
l.c.l., works.....lb. .17½- .20½
tanks, works .....lb. .15½- —
Monoetrylether, dms., c.l., wks. lb. .14½- —
l.c.l., works.....lb. .15½- .16½
tanks, works .....lb. .13½- —
Monoethylether, acetate, dms., c.l., works..lb. .11½- —
l.c.l., dms. .....lb. .12½- .15½
tanks, works .....lb. .10½- —
Monomethylether, dms., c.l., works..lb. .15½- —
l.c.l., works.....lb. .16½- —
tanks, works .....lb. .14½- —
Ethyldiethanolamine, l.c.l., dms., works..lb. .80 - —
5-gal. lots to dms., works, lb. .90 - —
less than 5-gal. lots, works, lb. 1.00 - —
Ethylethanolamine (see Ethylmonoethanolamine).
Ethylmonoethanolamine, l.c.l., dms., works..lb. .80 - —
5-gal. lots to dms., works..lb. .90 - —
less than 5-gal. lots, works, cns..lb. 1.00 - —
distilled mixture, l.c.l., dms., works..lb. .60 - —
5-gal. lots to dms., works, lb. .70 - —
less than 5-gal. lots, works, lb. .80 - —
undistilled mixture, 5c. less than distilled mixture.
Ethylidinaniiin, dms. .....lb. .45 - .47½
Eucalyptol, cns., dms.....lb. 2.00 - 2.50
Eucalyptus, leaves, bls.....lb. .10 - .13
Eugenol, cns., dms.....lb. 2.75 - 2.80
Euphorbia, bls. .....lb. .12 - .13

F

Feldspar, enamel, 100 mesh, bulk, works..ton. 14.00 -17.50
l.c.l., minimum 2 tons...ton. 17.00 -20.50
glass, 20 mesh, bulk, works.ton. 9.75 -12.25
l.c.l., minimum 2 tons...ton. 12.75 -16.25
pottery, bulk, Me., works...ton. 17.00 -19.00
N.C., works.....ton. 17.00 -19.00
l.c.l., minimum 2 tons, ton. 20.00 -22.00

Fennel seed, Indian, bgs.....lb. .08 - .08½
Fenugreek seed, bgs.....lb. .08¾- 09¼
Ferric, sulphate, anhyd., c.l., works..ton.35.00 - —
l.c.l. .....ton.40.00 - —
Film scrap, colored, cs., 50 lbs. or over, works..lb. .13½- .14
smaller lots, works.....lb. .15 - —
water white, cs., 50 lbs. or over, works..lb. .14½- .15
smaller lots, works....lb. .17 - —
Fir, balsam, Canada, cns....gal.18.00 -19.00
Oregon, bbls.....gal. 1.85 - 2.25
Fish berries, bgs.....lb. .24 - .25
Fish[1] meal, grd., bgs., East Coast fish factories..ton.72.50 - —
scrap, menhaden, new catch, dried, 60% protein, bulk, East Coast fish factories.ton.69.50 - —
acid, 6-7% ammon., 3% a.p.a., bulk, Carolina and Florida fish factories.....unit-ton. No prices
Long Island fish factories, unit-ton. No prices
Flake white, dom., bbls.....lb. .09 - —
kegs .....lb. .11 - —
Fleaseed, French, black, bgs..lb. .65 - .70
Indian, blonde, bgs.....lb. .15 - .17
Fluorspar, dom.,[1] No. 1 ground, 95-98%, bulk, c.l., f.o.b. mines..net ton.33.00 - —
bgs., c.l., f.o.b. mines.ton.36.20 - —
washed gravel, 85.5%, f.o.b. Ky. and Ill.-Ky. mines, net ton.25.00 - —
No. 2 lump, 85.5%, f.o.b. Ky. and Ill. mines.....net ton.25.00 - —
crude, 70% f.o.b. N. Mex., mines..net ton.10.00 - —
85%, f.o.b., Colorado mines, net ton.11.50 - —
imported, 85.5%, duty paid.... short ton.26.00 - —
Formaldehyde,[1,3,6] bbls., c.l., works..lb. .0550- .0575
l.c.l., works .....lb. .06 - .0625
dms., c.l., works.....lb. .0515- .0540
l.c.l., works.....lb. .0565- .0590
tanks .....lb. .04 - .04¼
Formaldehyde prices are under 4½c. to 9½c. OPA ceiling.
Fringetree bark, bls.....lb. .30 - .40
Fullers earth, dom., powdered, bgs., c.l., f.o.b. Fla., Ga., mines..ton. 8.50 -15.00
f.o.b. Tex., mines.....ton.12.50 - —
import, Eng., bgs., c.l., dlvd. N. Y...ton.30.00 -40.00
Fumitory herb, bls.....lb. .58 - .60
Furfural, ref., dms., c.l., works, lb. .15 - —
l.c.l., works.....lb. .17½- .25
tech., dms., contracts, 150,000 lbs..lb. .10 - —
tanks, works.....lb. .09 - —
dms., c.l., works.....lb. .12½- —
l.c.l., works.....lb. .15 - .20
Fusel oil, crude, dms., incl., works..gal. .75 - —
refd., dms., incl., dlvd....lb. .18½- .19½
Fustic, cryst., bags, No. 1....lb. .32 - —
No. 2..lb. .30 - —
No. 3..lb. .28 - —
extract, bbls., No. 1.....lb. .16 - —
No. 2 .....lb. .15 - —
No. 3 .....lb. .12½- —

G

G salt, bbls.....lb. .45 - —
Galangal root, bls.....lb. .28 - .30
Gambier, common, cases.....lb. No prices.
plantation, cases.....lb. No prices.
cubes, Singapore, cases...lb. .30 Nom.
extract, bbls. .....lb. .09½- .12
Gasoline[1] at refinery:—
Bayonne, US motor, 65 octane, tanks, ex tax..gal. .0895- —
72-74 octane, ex tax.....gal. .092 - —
California 78 octane at refineries, tanks..gal. .075 - —
Gulf Coast, US motor, 72-74 octane, tanks, ex tax..gal. .05½- .06
Arkansas, US motor, 72-74 octane, leaded, tanks, car lots, ex tax..gal. .06 - —
Group 3, 72-74 octane, tanks, gal. .05⅝- .06
Oklahoma-Texas, US motor, 72-74 octane, tanks, ex tax, gal. .05⅜- .06
natural, 26-70, tanks....gal. .03½- .03⅝
Gelatin, silver, cs.....lb. .90 - .97
Gelsemium root, bls.....lb. .15 - .19
Gentian root, bls.....lb. .55 - .65
grd., bbls., bxs.....lb. .58 - .67
powd., bbls., bxs.....lb. .60 - .69
Geraniol, 92-96%, cns., dms....lb. 3.50 - 4.50
Ginger,[1] African, No. 1, bls...lb. .28 - .29
Calicut, bgs. .....lb. .24½- .25
Cochin, bleached, bgs.....lb. .26 - .26½
unbleached, bgs.....lb. .25 - .25½
Jamaica, No. 1, bgs.....lb. .39 - .40
No. 2, bgs.....lb. .39 - .40
No. 3, bgs.....lb. .38½- .39
Ginseng root, wild Southern, cs., lb.12.00 -13.00
Glauber's salt, anhyd. (see Soda Sulphate).
cryst., dom., bgs., bbls., c.l., works..100 lbs. 1.05 - 1.28
5 tons or over, works.. 100 lbs. 1.15 - 1.35
less than 5 tons, works.. 100 lbs. 1.25 - 1.45
import, bgs. .....100 lbs. No prices.
Glue, bone, calcimine type, 24 millipoise, 36 jelly- East of Midwest..lb. .16 - —
l.c.l. .....lb. .17 - —
30/58, c.l. .....lb. .15½- —
l.c.l. .....lb. .16½- —
58/82, c.l.....lb. .17 - —
58 millepoise, 82 jellygrams, bgs., l.c.l. .....lb. .18 - —
82/108, c.l. .....lb. .18½- —
l.c.l. .....lb. .19 - —
hide,[1] 100-121 (jelly test in grams, bgs., c.l., dlvd....lb. .14 - —
bbls., c.l., dlvd.....lb. .14½- —
122-149, bgs., c.l., dlvd....lb. .15 - —
bbls., c.l., dlvd.....lb. .15½- —
150-177, bgs., c.l., dlvd....lb. .16 - —
bbls., c.l., dlvd.....lb. .16½- —
178-206, bgs., c.l., dlvd....lb. .17 - —
bbls., c.l., dlvd.....lb. .17½- —
207-236, bgs., c.l., dlvd....lb. .18 - —
237-266, bgs., c.l., dlvd....lb. .19 - —
bbls., c.l., dlvd.....lb. .19½- —
267-298, bgs., c.l., dlvd....lb. .20 - —
bbls., c.l., dlvd.....lb. .20½- —
299-330, bgs., c.l., dlvd....lb. .21 - —
bbls., c.l., dlvd.....lb. .21½- —
331-362, bgs., c.l., dlvd....lb. .22 - —
bbls., c.l., dlvd.....lb. .22½- —
363-394, bgs., c.l., dlvd....lb. .23 - —
bbls., c.l., dlvd.....lb. .23½- —
Glue, hide, 395-427 bgs., c.l., dlvd. lb. .24 - —
bbls., c.l., dlvd.....lb. .24½- —
428-460, bgs., c.l., dlvd....lb. .25 - —
bbls., c.l., dlvd.....lb. .25½- —
461-494, bgs., c.l., dlvd....lb. .26 - —
bbls., c.l., dlvd.....lb. .26½- —
495-529, bgs., c.l., dlvd....lb. .27 - —
bbls., c.l., dlvd.....lb. .27½- —

Hide glue transportation charges in excess of 75c. per hundredweight may be added. Prices are those established for sale by producers; prices for glue sold by jobbers are 2c. to 3½c. per pound higher according to grade. Less car lot prices are 1c. per pound higher than car lot. Maximum prices for chrome glue and coney glue in carload lots, wherein the jelly test in grams is 267 or higher, are 2c. per pound higher than the prices established above, while those for these glues, wherein the jelly test is below 267, are 1c. per pound higher than the above prices.

Glycerin[1], Zones A and C, C.P., (B.P. 98%), drums, car lots, dlvd..lb. .18¾- —
less car lots, dlvd..lb. .19¼- —
tanks, dlvd. .....lb. .18½- —
C.P. (USP 95%), drums, car lots, dlvd..lb. .18¼- —
less car lots, dlvd..lb. .18¾- —
tanks, dlvd. .....lb. .18 - —
dynamite, high gravity, yellow, distilled, drums, car lots, dlvd..lb. .18¼- —
less car lots, dlvd...lb. .18¾- —
tanks, dlvd. .....lb. .18 - —
soapiye, 80%, drums, car lots, dlvd..lb. .11½- —
less car lots, dlvd...lb. .11¾- —
tanks, dlvd. .....lb. .11½- —
saponification, 88%, to refiners, drums, c.l., dlvd..lb. .12¾- —
less car lots, dlvd...lb. .12¾- —
tanks, dlvd. .....lb. .12¾- —
saponification, 88%, individual users, dms., c.l., f.o.b. point of manufacture..lb. .13¾- —
less car lots, same basis, lb. .14¾- —
tanks, same basis.....lb. .12¾- —

Glycerin prices in Zone B are 2c. higher.

Zone A means all points east of and including N. Dak., S. Dak., Neb., Kansas, Omaha, Texas, Laramie County, Wyo.; Col.; east of but not including the following counties:—Jackson, Grand, Gilpin, Jefferson, Douglass, Teller, Fremont, Custer, Huerfano, and Costilla.

Zone B means the territory between Zones A and C, as follows:—Washington, east of and including the following counties:—Okanogan, Chelan, Kittitas, Yakima, Klickat; Ore., east of and including the following counties:—Hood River, Wasco, Jefferson, Deschutes, Klamath; Nev., Ariz., New Mex., that part of Col. west of and including those counties mentioned above; Utah, Wyo., excepting Laramie County; Idaho and Mont.

Zone C means the territory west of Zone B.

Glycine, medicinal, bbls., tins.lb. 1.70 - 2.00
Glycol boriborate, dms.....lb. .22 - —
Phthalate, dms. .....lb. .38 - —
Stearate, dms. .....lb. .26 - —
Gold, U. S. purchase price.....oz.35.00 - —
Chloride, acid brown, bots..oz.20.75 -21.00
yellow, bots. .....oz.18.75 -19.00
Gold-soda chloride, photo., bots., oz.13.00 - —
USP IX, bots.....oz.14.50 -14.75
Gold of pleasure seed, bgs....lb. .30 - .32
Goldenseal root, bls.....lb. 4.00 - 4.25
powd., bxs. .....lb. 4.25 - 4.50
Grains of Paradise, bgs.....lb. .28 - 36
Graphite,[6] flake (cryst.), 90%, 325 mesh, 50% graphitic, carbon, bgs., c.l., works..lb. .07 - —
bbls., c.l., works.....lb. .07¼- —
l.c.l., works.....lb. .07½- —
65% graphitic, carbon, bgs., c.l., works..lb. .02½- —
l.c.l., works.....lb. .03¼- —
bbls., c.l., works.....lb. .02¾- —
80% graphite, carbon, bgs., c.l., works..lb. .03½- —
bbls., c.l., works.....lb. .03¼- —
l.c.l., works.....lb. .04½- —
Grease,[1,3] house, loose.....lb. .08¼- —
white, loose .....lb. .08¾- —
Wool (see Adeps lanae and Degras).
Green,[3] chrome, CP, dark, light, medium blue content up to 5%, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. River, including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis..lb. .23 - —
6-10%, bbls., same basis.lb. .24 - —
11-15%, bbls., same basis.lb. .25 - —
16-20%, bbls., same basis.lb. .25½- —
21-25%, bbls., same basis.lb. .26 - —
26-30%, bbls., same basis.lb. .26½- —
31-35%, bbls., same basis.lb. .27½- —
36-40%, bbls., same basis.lb. .29 - —
41-45%, bbls., same basis.lb. .30½- —
46-50%, bbls., same basis.lb. .33 - —
reduced color, 5%, same basis lb. .06¾- —
9-10%, bbls., same basis.lb. .07½- —
11-13%, bbls., same basis.lb. .08 - —
14-16%, bbls., same basis.lb. .08¼- —
17-19%, bbls., same basis.lb. .08½- —
20-21%, bbls., same basis.lb. .08¾- —
22-23%, bbls., same basis.lb. .09 - —
24-25%, bbls., same basis.lb. .09¼- —
26-27%, bbls., same basis.lb. .09½- —
28-29%, bbls., same basis.lb. .10 - —
30-31%, bbls., same basis.lb. .10¼- —
32-33%, bbls., same basis.lb. .12 - —
34-35%, bbls., same basis.lb. .13 - —
36-40%, bbls., same basis.lb. .14 - —
41-45%, bbls., same basis.lb. .17 - —
46-50%, bbls., same basis.lb. .17½- —
51-55%, bbls., same basis.lb. .18 - —
56-60%, bbls., same basis.lb. .18½- —
61-65%, bbls., same basis.lb. .19 - —
66-70%, bbls., same basis. lb. .20 - —
71-75%, bbls., same basis.lb. .21 - —

Green, chrome, prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

Chrome oxide, drums, pure, works..lb. .24 - —
Tetrahydroxide, bbls. .....lb. .85 - —
Paris (see P).
Tungstated, brilliant, kgs....lb. 3.75 - —
emerald, kgs. .....lb. 2.60 - —
Verdigris (see V).
Green dyes are listed under Dyes.
Grindelia robusta, bls.....lb. .11 - .12
Guaiac resin, cs.....lb. .80 - .85
strained, cs.....lb. 1.50 - 1.60
Wood, bls. .....lb. .05 - .06
Guaiacol, liq., dms.....lb. 1.75 - 2.01
Carbonate, fib. dms.....lb. 2.40 - 2.74

ENTREGAS INMEDIATAS

ÁCIDO TARTÁRICO

Crémor Tártaro
Tártaro Emético
Acetato Sódico
Sulfato de Cinc
Fluoruro Silíceo Sódico
Bicromatos
Magnesia Calcinada (pesada)

OTROS PRODUCTOS ESPECIALES

Distribuidores para THE RUFERT CHEMICAL COMPANY

FORMIATO DE NÍQUEL • También CATALIZADOR DE NÍQUEL
CARBONATO DE NÍQUEL • ÓXIDO DE NÍQUEL, etc.

GOLWYNNE CHEMICALS CORPORATION

420 LEXINGTON AVENUE • NEW YORK, N.Y., E.U.A.

Guarana, powd., cs.....lb. 1.20 - 1.80
Gum aloe (see A).
Ammoniac, tears, cs.....lb. 1.20 - 1.25
Arabic, umber sorts, cleaned, bgs..lb. .14½- .15
powd., bbls. .....lb. .20 - .21
white, sorts, 1, bgs.....lb. .33 - .35
Asafetida (see A).
Aspraltum (see A).
Benzoin, Siam, cs.....lb. 4.50 - 4.75
Sumatra, cs.....lb. .50 - .55
Camphor (See C).
Chicle, prime, 33% moisture, bgs., ton lots..lb. .40 - .42
Copal, Congo, No. 1 unsorted..lb. .14¾- —
No. 2, unsorted.....lb. .12¾- —
No. 3, unsorted.....lb. .11¼- —
Manila, Boeas, amber and dark..lb. .14½- —
Boeas, Macassar, light....lb. .15½- —
Loba, A.....lb. .14 - —
B .....lb. .13¾- —
C .....lb. .13⅜- —
CBB .....lb. .12 - —
CNE .....lb. .10 - —
D .....lb. .12¾- —
DBB .....lb. .11 - —
Du .....lb. .08⅞- —
DK .....lb. .09½- —
dust .....lb. .07⅝- —
MA .....lb. .09⅝- —
MB .....lb. .09¼- —
WS .....lb. .11⅜- —
Philippine, amber, sorts..lb. .10¼- —
extra pale sorts.....lb. .12⅝- —
nubs .....lb. .13⅝- —
pale chips.....lb. .13 - —
scraped .....lb. .15 - —
seeds and dust.....lb. .08⅝- —
small pale chips.....lb. .11⅝- —
Sambas and white split chips lb. .15½- —
Singapore dust .....lb. .08¾- —
spirit soluble, CBB.....lb. .12 - —
DBB .....lb. .11 - —
MA .....lb. .09⅝- —
MB .....lb. .09¼- —
WS .....lb. .12¼- —
Pontianak, bold, genuine...lb. .22⅝- —
chips .....lb. .12⅜- —
mixed .....lb. .17⅜- —
nubs .....lb. .18⅜- —
split .....lb. .19¼- —
Dammar, Batavia A.....lb. .35⅝- —
A/C .....lb. .31¼- —
A/D .....lb. .28¾- —
A/E .....lb. .25⅝- —
B .....lb. .34⅝- —
C .....lb. .28⅝- —
D .....lb. .25⅝- —
dust .....lb. .13⅜- —
E .....lb. .18¾- —
F .....lb. .13¾- —
dust .....lb. .13⅜- —
Singapore, No. 1.....lb. .30⅝- —
2 .....lb. .25⅜- —
3 .....lb. .12⅜- —
chips .....lb. .23½- —
dust .....lb. .13 - —
seeds .....lb. .17¾- —
East Indian, Batu, bold, scraped..lb. .10¼- —
unscraped .....lb. .09 - —
chips .....lb. .05¾- —
dust .....lb. .05½- —
nubs and chips.....lb. .05¾- —
black, bold scraped.....lb. .12 - —
unscraped .....lb. .07½- —
nubs and chips.....lb. .07¼- —
chips .....lb. .11½- —
dust .....lb. .05½- —
nubs .....lb. .13⅜- —
Rasak, bold .....lb. .22⅜- —
chips .....lb. .11⅝- —
dust .....lb. .05½- —
nubs .....lb. .16⅜- —

On arrivals since June 1, importers have been authorized by OPA's amended order M-63 to add to the above prices charges of approximately 6½% for freight, marine and war risk insurance.

Gums, copal, Congo and Pontianak are packed in bgs.; Manila copal gums are packed in baskets; dammar gums are packed in cases; East India gums are packed in bgs.; gum elemi is packed in cans. Prices are in carload lots, ex dock or ex whse., San Francisco or New York. L.c.l. prices are ¼c. to ½c. per lb. higher.

Elemi .....lb. .08⅞- —
Ester, ordinary, carload lots. N. Eng., Middle Atlantic States, Va., W. Va., N. C., Ky., Ohio, Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn., and St. Louis, Mo., f.o.b. cars, destination.....lb. .09½- —
other points .....lb. .10 - .11
ten drums, N. Eng., etc..lb. .09⅝- —
other points .....lb. .10½- .11⅝
single drums, N. Eng., etc. lb. .10 - —
other points.....lb. .10⅝- .12

Ester gum spot prices are ½c. per pound higher.

Euphorbium, cs. .....lb. 1.50 Nom.
Galbanum, cs. .....lb. 1.60 - 1.65
Gamboge, pipe, cs.....lb. 2.30 - 2.35
powd., bbls. .....lb. 2.50 - 2.55
Ghatti, soluble, bgs.....lb. .11 - .15
Guaiac (see Gualac resin).
Karaya, bbls., bxs., dms.....lb. .14 - .33
Kauri, Bush, bold.....lb. .40 - —
assorted .....lb. .35 - —
chips .....lb. .32 - —
dark .....lb. .18 - —
bright .....lb. .18 - —
BXXX .....lb. .77 - —
B1 .....lb. .34 - —
B2 .....lb. .30 - —
B3 .....lb. .27½- —
80% chips.....lb. .16 - —
XXX .....lb. .66 - —
1 .....lb. .43 - —
2 .....lb. .31 - —
3 .....lb. .22 - —

Gum Kauri prices are for carload lots, packed in cases, ex dock or ex whse. San Francisco or New York. L.c.l. prices are ¼c. to ½c. per pound righer. On arrivals of gum kauri since June 1, importers have been authorized by OPA's amended order M-63 to add to the above prices charges of approximately 6½% for freight, marine and war risk insurance.

Kino, tins.....lb. No prices.
Locust bean, powd., bbls.....lb. 1.15 - 1.25
Mastic, cs. .....lb. 3.50 - 3.75
Myrrh, USP, cs.....lb. .75 - .76
Olibanum, siftings, cs.....lb. .12 - .13
tears, cs. .....lb. .20 - .35
Opium (see O).
Rosin (see R).
Sandarac, cks.....lb. .95 - .97½
Scammony, cs.....lb. 1.30 - 1.35
Talha, bgs. .....lb. .10 - .11
Tragacanth, Alleppo, No. 1, cs., lb. 3.75 - 3.80
No. 2, cs.....lb. 3.40 - 3.45
No. 3, cs.....lb. 1.10 - 1.20
Yacca,[1] bgs.....lb. .06 - .07½

Gypsum, Keene's cement, paper bgs., c.l., f.o.b. Acme, Tex., frt. equald..ton. 22.65 - —
Medicine Lodge, Kan., frt. equaled..ton. 17.00 - —
Harlem River, N. Y., frt. equaled..ton. 28.25 - —
New Brighton, N. Y., frt. equald..ton. 28.25 - —
Southard, Oklahoma, frt. equald..ton. 17.00 - —
Sweetwater, Texas, frt. equald..ton. 21.45 - —
Plaster of paris, paper bgs., f.o.b. Blue Rapids, Kans., frt. equald..ton. 12.50 - —
Acme, Tex., frt. equald. ton. 12.50 - —
Harlem River, N. Y., frt. equald..ton. 13.00 - —
Medicine Lodge, Kans., frt. equald..ton. 12.50 - —
New Brighton, N. Y., frt. equaled..lb. 13.00 - —
Southard, Oklahoma, frt. equald..ton. 12.50 - —
Sweetwater, Texas, frt. equald..ton. 12.50 - —
Stucco, paper bgs., c.l., f.o.b. Acme, Tex., Akron, N.Y., Blue Rapids, Kansas; Clarence Center, N. Y.; Fort Dodge, Ia.; Grand Rapids, Mich.; Gypsum, O.; Harlem River, N. Y.; National City, Mich.; New Brighton, N. Y.; Plasterco, Ga.; Portsmouth, N. H.; Roton, Texas; Southard, Okla.; Sweetwater, Texas; frt. equald..ton. 8.00 - —
Saltville, Va.....lb. 9.00 - —
Terra Alba, dom., paper bgs., c.l., f.o.b. New Brighton, N.Y.; Southard, Okla..ton. 12.00 - —
Harlem River, N.Y..ton. 12.00 - —
import, bgs., ex dock....ton. No prices.

H

Hawthorn berries, bgs.....lb. 1.10 - 1.15
Heliotropin, cryst., cns.....lb. 5.25 - 5.50
Hellebore root, white, powd., bbls. lb. .46 - .47
Helonias root, bls.....lb. .82 - .83
Hematine, cryst., bgs., No. 1..lb. .34 - —
No. 2 .....lb. .30 - —
No. 3 .....lb. .28 - —
No. 4 .....lb. .26 - —
No. 5 .....lb. .24 - —
paste, bxs., No. 1.....lb. .14½- —
No. 2.....lb. .13½- —
No. 3.....lb. .12½- —
Hemlock bark extract, 25% tan, c.l., bbls., works..lb. .0385- —
tanks, works .....lb. .0325- —
Hempseed, Manchur., bgs.....lb. .14½- .15
Henbane leaves, bbls.....lb. 1.90 - 2.10
Henna leaves, bls.....lb. .25 - .30
powd., bbls., bxs.....lb. .29 - .35
Heptane,[1] 56°-100°C, industrial grade, dms., c.l., Group 3..gal. .12½- —
l.c.l., Group 3.....gal. .19 - —
tankcars, Group 3.....gal. .10 - —
laboratory grade, dms., c.l., Group 3..gal. .16 - —
l.c.l., Group 3.....gal. .29 - —
10 gal., Group 3.....gal. .55 - —
77°-115°, industrial grade, dms., c.l., Group 3..gal. .13 - —
l.c.l., Group 3.....gal. .19 - —
tankcars, Group 3.....gal. .10½- —
laboratory grade, dms., c.l., Group 3..gal. .16 - —
l.c.l., Group 3.....gal. .29 - —
10 gal., Group 3.....gal. .55 - —
Hexaldehyde, normal, dms., c.l., works..lb. 1.10 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine[2,5], tech., dms., 1,500 lbs. or more, shipment, f.o.b. Perth Amboy or N.Y.C..lb. .32 - —
150 to 1,350 lbs., shipment, same basis..lb. .33 - —
USP, dms., 500 lbs. or more, shipment, same basis..lb. .38 - —
fib. ctns., same basis.....lb. .40 - —
Hexanes[1] 60°-70°C, industrial grade, dms., c.l., Group 3..gal. .13½- —
l.c.l., Group 3.....gal. .19 - —
tankcars, Group 3.....gal. .11 - —
laboratory grade, dms., c.l., Group 3..gal. .16 - —
l.c.l., Group 3.....gal. .29 - —
10 gal., Group 3.....gal. .55 - —
Hexanol, dms., l.c.l., works..lb. .25 - —
Homatropine hydrobromide, 25 oz. lots, bots..oz. 37.50 -42.00
Hoofmeal, 17-18% ammon., bulk, f.o.b. Chicago..unit. 4.25 - 4.50
Hops, NF, bls.....lb. .26 - .27
Horehound, bls. .....lb. .12 - .14½
Hydrangea, root, bls.....lb. No prices.
Hydrastine, bots., 4 ozs.....oz. 20.00 - —
Hydrochloride, bots., ozs..oz. 20.00 - —
Sulphate, bots., 4 ozs.....oz. 29.00 - —
Hydrastinine, 15 grs., bots..bot. 1.95 - —
Hydrastis (see Golden seal).
Hydrofuramide, dms., 100 lbs. or more, works..lb. .30 - —
fib. ctns., works.....lb. .40 - —
Hydrogen peroxide, USP, bbls.lb. .08¾- .04
100 vols., cbys., E. of Miss. River; West Coast via Panama Canal..lb. .16 - .18½
Hydroquinone, dealers, bbls., dms. lb. .90 - .94
Hydroxycitronellol, cns.....lb. 6.50 - 7.50
Hyoscine hydrobromide, bots., gram. 4.50 - —
Hyoscyamine, bots. .....oz. 37.50 - —
Hydrobromide, bots. .....oz. 37.50 - —
Sulphate, bots. .....oz. 37.50 - —
Hypernic, cryst., bgs., No. 1..lb. .42 - —
No. 2.....lb. .34 - —
extract, bbls., No. 1.....lb. .24 - —
No. 2.....lb. .19 - —

I

Iceland moss, bls.....lb. 1.45 - 1.50
Ichthyol, bots.....lb. 4.00 - —
Indian red (see Red Indian).
Indigo, nat., chests.....lb. 2.14 - 2.20
synth., paste, bbls.....lb. .16½- .19
powd., bbls.....lb. .74½- .85
Indium metal.....oz. 12.50 - —
Indol, CP, bots.....lb. 28.00 -30.00
Insect flowers (see Pyrethrum).
Iodine, crude, jars, 25 lbs....lb. 1.67 - —
kgs., 150 lbs., less 5%, ex whse., Staten Island..lb. 1.35 - 1.44
resubl., 5 lb. bots.....lb. 2.10 - —
50 lb. lots.....lb. 2.00 - —
Iodoform, 100-lb. dms.....lb. 3.95 - 4.10
jars .....lb. 4.20 - —
Ionone, alpha, bots.....lb. 2.75 - 2.80
beta, bots.....lb. 3.90 - 3.25
Methyl, alpha, 100%, cns....lb. 4.35 - —
Ipecac, root, bgs.....lb. 1.66 - 1.85
powd., bgs.....lb. 1.76 - 1.95
Irish moss, ordinary, bls.....lb. .26 - .27
powd., 80-90 mesh, bbls..lb. .32 - .33
prime bleached, bls.....lb. .40 - .50
powd. .....lb. .52 - .53
Iron acetate, N. F., IV., 100-lb. cbys..lb. .17 - —
50 lbs. djns.....lb. .18 - —
liquor, bbls., c.l., dlvd....lb. .03 - —
l.c.l., dlvd.....lb. .04 - —
cbys., wks., frt. alld.
Chloride (ferric), tech., anhydr., 390-lb. dms..100 lbs. 4.65 - 6.25
150-lb. dms.....100 lbs. 5.00 - 6.00
cryst., bbls., works, frt. alld. or equald..lb. .05 - .08
kegs, works, frt. alld. or equaled..lb. .07½- .08
USP X, cryst., bbls.....lb. .07½- —
kegs .....lb. .08½- —
solut., cbys., works, frt. alld. or equaled..lb. .06½- .07½
djns, ...lb. .07½- —
Citrate, USP VIII, pearls....lb. .72 - .75
powd., cns.....lb. .84 - .87
scales .....lb. .77 - .80
Glycerophosphate, bbls., 1,000-lb. lots..lb. 3.30 - 3.39
100-lb. lots.....lb. 3.40 - 3.49
cns., 25 lbs.....lb. 3.52 - 3.62
Hyposulphite, bbls., dms.....lb. 1.50 - 1.52
Iodide, bots.....lb. 3.18 - 3.52
syrup, cbys.....lb. .39 - .40
bots. .....lb. .53 - .59
Nitrate, red, tech., dms.....lb. .03½- .04
Oxalate, powd., kgs.....lb. .47 - .49
cans .....lb. .52 - —
pearls, cns.....lb. .82 - —
Oxide, black (see Black iron oxide).
Phosphate, ferric, pearls, cns., 50 lbs..lb. .54 - —
25 lbs.....lb. .57 - —
scales, cns., 50 lbs.....lb. .59 - —
25 lbs.....lb. .62 - —
Pyrophosphate, pearls, cns...lb. .59 - .62
scales, cans.....lb. .64 - .67
Reduced, 90% cs.....lb. .65 - .75
Sulphate, tech. (see Coppers and ferric sulphate).
Iron sulphate, USP, cryst., 275-lb., bbls..lb. .04½- —
dms., 100 lbs.....lb. .06½- —
Iron-ammonia citrate, brown, gran., 2,000-lb. lots, dms.lb. .32 - —
200-lb. lots, dms.....lb. .35 - —
pearls, 2,000-lb. lots, dms..lb. .32 - —
200-lb. lots, dms.....lb. .35 - —
scales, 2,000-lb. lots, dms..lb. .44 - —
200-lb. lots, dms.....lb. .47 - —
Prices on green are the same as for brown.
Iron-ammonia oxalate,[6] bbls...lb. .23½- —
dms., kgs.....lb. .25½- —
Iron-soda oxalate, bbls.....lb. .23½- —
dms. .....lb. .25½- .26½
Isobutyl acetate, 55-gal. dms., works..lb. .0860- —
tanks, works.....lb. .0760- —
Propionate, dms., works.....lb. .102 - —
Isopentane, 50-gal. dms., single, works..gal. .45 - —
10-gal. dms., single, works.gal. .55 - —
Isophorone, dms., works.....lb. .25 - —
Isopropylamine, dms., works...lb. .35 - —
Isopropanol (see Alcohol, isopropyl).
Isopropyl acetate, dms., 5 gals., E. of Rockies, frt. alld..lb. .12 - —
c.l., E. of Rockies, frt. alld. lb. .11 - —
l.c.l., E. of Rockies, frt. alld..lb. .11½- —
tanks, E. of Rockies, frt. alld..lb. .10 - —
Alcohol (see Alcohol).
Ether, dms., 5 gals., frt. alld. gal. .55 - —
55 gals., c.l., E. of Miss., frt. alld..gal. .35 - —
55 gals., c.l., W. of Miss., frt. alld..gal. .39 - —
l.c.l., E. of Miss., frt. alld. gal. .44 - —
tanks, E. of Miss., frt. alld. gal. .25 - —
W. of Miss., frt. alld.. gal. .29 - —

J

Jaborandi leaves, bls.....lb. .09 - .10
Jalap root, NF, bls.....lb. .45 - .62
powd., bbls., bxs.....lb. .52 - .53
resin, lump, 100-lb. lots, cns..lb. 5.85 - —
powd., bxs.....lb. 5.90 - —
Juniper berries, bgs.....lb. .34 - .35

K

Kamala, tins.....lb. .39 - .40
Kaolin (see China clay).
Kava kava root, bls.....lb. .27 - .28
Kerosene[1] at refinery:—
Bayonne, 41-43 w.w., tanks. gal. .068- —
California (f.o.b. San Francisco), truck..gal. .11½- —
Gulf ports, 41-43, bulk....gal. .03⅞- .04¼
Arkansas, 41-43 w.w., bulk, car lots..gal. .04⅝- —
Oklahoma-Texas, 41-43 w.w., tanks..gal. .04⅝- .04½
Pennsylvania, 45-46 and 47, w.w., tanks..gal. .06¼- .07⅝
Kola nuts, bgs.....lb. .08 - .11

L

Lady slipper root, bls.....lb. .48 - .50
Lanolin (see Adeps lanae).
Lard,[1,5] city, trcs.....100 lbs. 13.80 - —
Western, choice, trcs....100 lbs. 13.80 - —
Larkspur seed, bgs.....lb. 3.25 - 3.50
Laurel berries, bls.....lb. .25 - .26
Leaves, Greek, bls.....lb. .55 - .56
Cyprus, bls.....lb. .39 - .40
Portuguese, bls.....lb. .18 - .18½
Spanish .....lb. .32 - .33
Lavender flowers, ordinary, bls.lb. .70 - .75
medium, bls.....lb. .80 - .85
select, bls.....lb. .90 - .95
Lead,[1] metal (see paint market).
Acetate,[6] white, broken, bbls.lb. .12½- —
cryst., bbls.....lb. .12½- —
gran., bbls.....lb. .13¼- —
powd., bbls.....lb. .13¼- —
Arsenate,[6] bls., c.l.....lb. .11 - .12
bgs., l.c.l.....lb. .11½- .12½

Lead arsenate prices are works or whse. basis, frt. alld. to dest. in lots of 96 lbs. or over; no frt. or truck allowance for works or whse. pick-ups.

Lead, blue, basic sulphate, bbls., c.l., dlvd., E..lb. .07½- —
dlvd., Ariz., Cal., Col., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo..lb. .07¾- —
l.c.l., dlvd. E.....lb. .07¾- —
Ariz., Cal., Col., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo..lb. .08 - —
Carbonate (see Lead, white).
Chloride, fib. dms., 100 lbs...lb. .49 - —
Iodide, NF V, powd., 5-lb. bots. lb. 2.80 - —
jars .....lb. 2.69 - —
Linoleate, pale, precip., bbls.lb. .22½- —
Metal (see daily quotations in market report).
Nitrate, bbls.....lb. .12½- —
Peroxide, powd., bbls., tech.lb. .23 - —
Oleate, bbls.....lb. .17⅜- —
Resinate, fused, 16%, bbls., c.l..lb. .09½- .10½
l.c.l. .....lb. .10¼- —
Stearate, precipitated, bbls..lb. .31 - .39
Red, dry, 95% or less Pb_3O_4, bbls., c.l. (20 tons), dlvd. Ariz., Ark., Colo., Fla., Ga., Idaho, La., Miss., Mont., Nev., N. Mex., Okla., Tex., Utah, Wyo., and E. of Cascade Mts. in Ore. and Wash..lb. .09¼- —
Other points.....lb. .09 - —
l.c.l., 5 tons, dlvd., Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex., and W. Cascade Mts. in Ore. and Wash.....lb. .09⅝- —
Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore. and Wash...lb. .10¼- —
Colo., Mont., N. Mex., Wyo..lb. .10 - —
other points.....lb. .09½- —
smaller lots, Ala., etc.lb. .10¼- —
Ariz., etc.....lb. .10⅝- —
Colo., etc.....lb. .10½- —
other points.....lb. .10 - —
97% Pb_3O_4, bbls., (20 tons), dlvd., Ala., etc..lb. .09½- —
other points.....lb. .09¾- —
l.c.l., 5 tons, dlvd. Ala., etc..lb. .10 - —
Ariz., etc.....lb. .10¼- —
Colo., etc.....lb. .10¼- —
other points.....lb. .09¾- —
smaller lots, dlvd., Ala. lb. .10⅝- —
Ariz., etc.....lb. .11 - —
Colo., etc.....lb. .10⅝- —
other points.....lb. .10¼- —
95% Pb_3O_4, bbls., c.l. (20 tons), dlvd. Ala., etc..lb. .09⅝- —
other points.....lb. .09½- —
l.c.l., 5 tons, dlvd. Ala., etc..lb. .10¼- —
Ariz., etc.....lb. .10⅝- —
Colo., etc.....lb. .10½- —
other points.....lb. .10 - —
smaller lots, dlvd., Ala., etc..lb. .10¼- —
Ariz., etc.....lb. .11¼- —
Colo., etc.....lb. .11 - —
other points.....lb. .10¼- —
in oil, 95% min., 100-lb. kgs., lb. .14 - —
Resinate, fused, 15%, bbls...lb. .10 - .12
pale, bbls.....lb. .12 - .14
Silicate, bgs., 5 tons.....lb. .0730- —
smaller lots.....lb. .0780- —
Stearate, bbls.....lb. .31 - .38
Sulphate (see Lead, white basic sulphate).
Titanate, bgs., or bbls., c.l (20 tons), works, frt. alld. lb. .11 - —
l.c.l., 5 tons, one delivery, E., frt. alld..lb. .11¼- —
Pac. Cst., ex whse....lb. .11¼- —
smaller lots, E., frt. alld.lb. .11¼- —
Pac. Cst., ex whse...lb. .11½- —
White, dry, basic carbonate, bbls., c.l., dlvd. Ariz., Calif., Colo., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash., and Wyo..lb. .08½- —
other points.....lb. .08¼- —
l.c.l., dlvd. Ariz., etc...lb. .08¾- —
other points.....lb. .08½- —
basic sulphate, bbls., c.l., dlvd. Ariz., etc..lb. .07½- —
other points.....lb. .07¼- —
l.c.l., dlvd., Ariz., etc.lb. .08 - —
other points.....lb. .07½- —
in oil, 100-lb. kgs., consumers lb. .13¾- —
100-lb. kgs., dealers....lb. .11¼- —
painters .....lb. .12¾- —

Consumers' prices and painters' prices are ½c. lower on orders of 500 lbs. or more.

Lecithin, edible, dms., c.l.....lb. .28½- —
l.c.l. .....lb. .29 - .43
tech., dms., c.l.....lb. .26 - —
l.c.l. .....lb. .26½- .37½
in cocoa butter, dms., c.l.....lb. .40½- —
l.c.l. .....lb. .41 - .55
Lemon peel, bls.....lb. .35 - .46
Licorice extract, mass, cns....lb. No prices.
powd., bbls..... .....lb. No prices.
root, natural, bls.....lb. .12 - .13
powder, bbls., bls.....lb. .22 - .26
select, bbls., cs.....lb. 1.05 - —
Lime, chemical (quicklime), lump or pebble, bulk, f.o.b.:—
Adams, Mass.....ton. 8.00 - —
Bellefonte, Pa.....ton. 7.50 - —
Berkley, W. Va.....ton. 7.50 - —
Carey, Ohio.....ton. 7.00 - —
Cedar Hollow, Pa....ton. 8.50 - —
Crab Orchard, Tenn.ton. 6.25 - —
Eagle Mountain, Va..ton. 7.00 - —
Farnams, Mass.....ton. 8.00 - —
Gibsonburg, Ohio....ton. 7.00 - —
Hannibal, Mo.....ton. 6.50 - —
Keystone, Ala.....ton. 6.25 - —
Knoxville, Tenn.....ton. 6.25 - —
Limedale, Ark.....ton. 7.00 - —
Longview, Ala.....ton. 6.25 - —
Manistique, Mich....ton. 8.00 - —
Martinsburg, W.Va..ton. 7.50 - —
Menominee, Mich....ton. 8.00 - —
Mitchell, Ind.....ton. 6.50 - —
Newala, Ala.....ton. 6.25 - —
Rimeon, Cal.[1].....ton. 13.00 - —
Ripplemead, Va.....ton. 7.00 - —
Riverton, Va.....ton. 7.00 - —
Rockland, Me.....ton. 8.00 - —
San Francisco, Cal..ton. 13.00 - —
Scioto, Ohio.....ton. 6.50 - —
Springfield, Mo.....ton. 7.00 - —
Woodville, Ohio.....ton. 7.00 - —
York, Pa.....ton. 7.50 - —
hydrated, f.o.b.:—
Adams, Mass.....ton. 8.50 - —
Bellefonte, Pa.....ton. 9.00 - —
Berkley, W. Va.....ton. 9.00 - —
Buffalo, N. Y.....ton. 10.00 - —
Carey, Ohio.....ton. 8.50 - —
Cedar Hollow, Pa....ton. 8.00 - —
Crab Orchard, Tenn.ton. 9.00 - —
Eagle Mountain, Va.ton. 8.50 - —
Farnams, Mass.....ton. 8.50 - —

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Prepared Monthly by U. S. Industrial Chemicals, Inc.

U.S.I. CHEMICAL NEWS

November ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1942

Two Puerto Rican Plants Yield New Essential Oils

Usefulness Foreseen in Soaps And in Cosmetic Preparations

SAN JUAN, P.R. — Two plants growing in Puerto Rico are regarded as offering interesting possibilities as sources of essential oils that may be useful in soaps and cosmetic preparations.

The oregano shrub yields an oil which is said to resemble marjoram. The oil is greenish in color, with a strong spicy aroma, and is reported to contain 52% phenols, with no aldehydes or ketones. It is soluble in 80% alcohol. Suggested applications include shaving lotions, hair lotions, and soaps.

The second plant — guayabacon — yields an oil described as having an aroma resembling a combination of the oils of bay, clove, eucalyptus, and pimenta. As originally distilled, the oil is pale yellow, but it turns green on standing. Composition is described as 78.5% cineole, 5% phenols (principally eugenol), 10% aldehydes and ketones, and possibly a trace of menthol.

Foundry Patterns Altered Or Repaired with Plastic

ARLINGTON, N. J. — Wood and metal foundry patterns can be repaired or altered with the aid of a plastic material previously used chiefly to strengthen box toes in shoes, it is claimed by a manufacturer here.

A piece of the plastic is cut to the desired shape and wet with a solvent, after which it can be readily molded to the form required. When dry, it is said to have a hard, even surface which can be lightly sanded and shellacked. It is believed that use of the plastic may permit the salvaging of many damaged patterns and facilitate alterations.

Plastic-repaired patterns are reported to have demonstrated their effectiveness in actual foundry practice.

Full Replacement of Acacia By Pectin Thought Possible

KNOXVILLE, Tenn. — Broader utility for pectin as a means of replacing acacia in such preparations as mineral oil emulsions is foreseen as a result of studies recently reported here. Earlier research had indicated that approximately half of the acacia could be replaced by pectin, (See U.S.I. ALCOHOL NEWS, May, 1942.)

It now appears that permanent emulsions of mineral oil can be prepared, in which the acacia is entirely replaced by pectin, provided suitable precautions are observed. A typical emulsion has these proportions:

Liquid petrolatum	50 cc.
Pectin	1 gm
Syrup	10 cc.
Vanillin	0.004 gm.
Alcohol	6 cc.
Distilled water	34 cc.

New Listing Issued on Surface-Active Agents

WASHINGTON, D. C. — A new compilation of surface-active compounds, recently completed here, gives comprehensive data on these materials from the standpoint of their interest to the manufacturers of cosmetics and pharmaceuticals.

Compounds of this general classification are extensively used as wetting, dispersing, and emulsifying agents, penetrants, detergents, and preservatives. The new listing gives the trade names and description of a large number of such compounds, while other sections indicate suggested uses and the chemical types of the compounds.

Copies of the complete 60-page report are available at a cost of 50 cents each. U.S.I. will gladly refer readers to a source from which they may be obtained.

Ethyl Acetoacetate Can be Alkylated by Tertiary Butyl Group

DURHAM, N. C.—The tertiary butyl group can be successfully introduced into ethyl acetoacetate by the aid of boron trifluoride, it has been discovered here. Following other experiments on the introduction of alkyl groups into ethyl acetoacetate, it has now been found that this compound can be alkylated by tertiary butyl alcohol or tertiary butyl ethyl ether. This reaction is described as being of special interest in view of the recognized difficulties in introducing tertiary alkyl groups into active methylenic compounds.

In a typical procedure, a mixture of 0.5 mole of tertiary butyl alcohol and 0.5 mole of ethyl acetoacetate was saturated with boron trifluoride at 0°, and allowed to stand for 6 hours at room temperature. A 14% yield of alkylated beta-keto ester was obtained. An ester-alcohol exchange apparently occurred, the product analyzing for tertiary butyl alpha-tertiary-butylacetoacetate. This product, on ketonic hydrolysis, yielded methyl neopentyl ketone, which was identified as the semicarbazone and 2,4-dinitrophenylhydrazone.

Ethyl Oxalacetate Can be Prepared by Simple Procedure

Sodium Derivative, Produced by U.S.I., Used as Starting Point

Ethyl oxalacetate — extensively used as an intermediate in dyestuff and pharmaceutical manufacture, can be prepared from ethyl sodium oxalacetate by a simple procedure described by a reader of U.S.I. CHEMICAL NEWS. The ethyl sodium oxalacetate is first suspended in ether, and dilute sulfuric acid is added after cooling the mixture. The remainder of the procedure follows conventional lines, using a low vacuum pump.

Stability of Sodium Salt

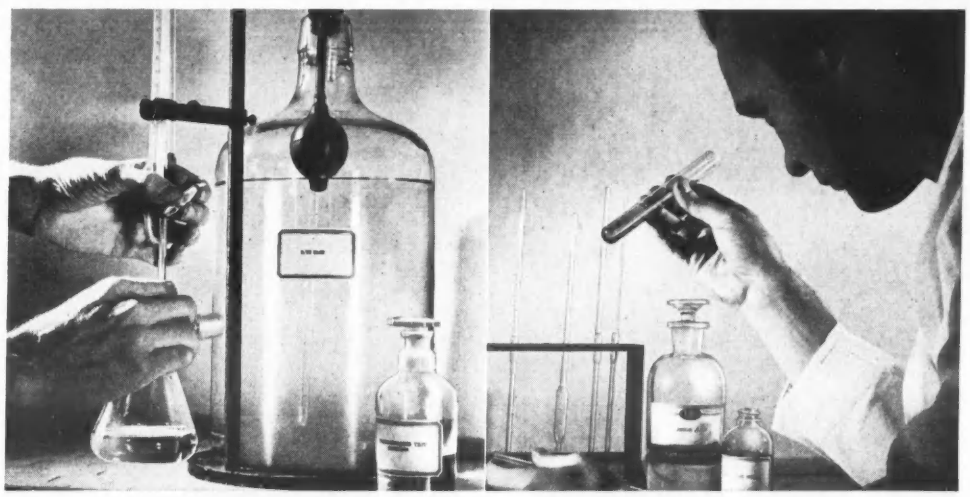
While chemists have long recognized the interesting possibilities of ethyl oxalacetate in organic synthesis, exploitation of its usefulness was at first hampered by its relative instability. This difficulty was overcome by U.S.I.'s production of the sodium derivative, which has a considerably higher degree of stability. The sodium derivative can be used for most of the purposes for which ethyl oxalacetate itself is suitable. In cases where the

(Continued on next page)

Ethyl Formate Increases Yield of Diethylmercury

In the preparation of diethylmercury from ethyl iodide and sodium amalgam, yields are increased about 50% when ethyl formate is used as the solvent instead of ethyl acetate, it has been reported as a result of recent studies. Similar increases in yield were observed when acetone is used as the solvent.

In preparing dimethylmercury by a similar procedure from methyl iodide, the opposite result was obtained. In this case, studies appeared to confirm the usefulness of the customarily used ethyl acetate, since ethyl formate or acetone decreased the yield.



U.S.I. Pure Alcohol is subjected to rigid tests to assure conformity with U.S.P. standards. At left is shown the titration step in a test to determine freedom from acidity. Photo at right shows examination of a sample to assure its freedom from alkaloids.

ADVERTISEMENT—*This entire page is a paid advertisement.*

November ★ **U.S.I. CHEMICAL NEWS** ★ 1942

Specific Gravity Tests On Petroleum Oils Made By Falling Drop Method

EL DORADO, Ark.—The falling drop method of densimetry offers a rapid, convenient, and accurate method of determining the specific gravity of petroleum oils, it has been discovered by a research worker here.

The procedure, which consists essentially in timing the fall of a drop of known size through a liquid immiscible with it, has been employed for a number of years in clinical techniques for determining the specific gravity of body fluids. Its adaption to the investigation of petroleum oils presages a far wider field of usefulness.

Range and Accuracy

In the petroleum oil tests, the liquid through which the drop falls is a solution of ethanol and distilled water. The percentage of ethanol by volume ranges from 45 to 98%, depending on the specific gravity range in which the test specimen is expected to fall. With these percentages of ethanol, specific gravities can be determined over the range from 0.836 to 0.993 at 25°/25°C.

Accuracy of the method is expected to be within ±0.0010 unit of specific gravity. A particular advantage of the method is that only a few drops of oil are required for the determination, thus making it adaptable to the small volumes sometimes obtained in analytical distillations or extractions.

Ethyl Oxalacetate Made From Sodium Derivative

(Continued from preceding page)

pure ester is desirable, however, the procedure outlined provides a simple means of preparing it as needed, while still benefiting by the greater stability of the sodium derivative during storage periods.

Use in Analysis

A number of the more important applications of ethyl oxalacetate and its sodium derivative were outlined in the July, 1942, issue of U.S.I. CHEMICAL NEWS, copies of which are available on request. A novel use in analytical procedures has recently come to light. When ethyl oxalacetate is dissolved in acetic anhydride, a brilliant blue color results in the presence of a trace of alkaline substance, such as sodium acetate, strychnine, nicotine, etc.

New Chemical Products For Crime Detection

Progress in the science of criminological investigation is expected to be facilitated by the development of new chemical materials undergoing formulation at the McDaniel Laboratories.

These new forensic chemicals, under the trade name of Scotland Yard Inspector, have been developed by J. Frank McDaniel, formerly attached to New Scotland Yard and the French Sureté through the U. S. Intelligence Department. In addition to their usefulness in crime detection, these materials are of interest as an outlet for some of the products of the chemical industry.

Among these new materials is a developer for latent fingerprints, described as having special affinity for the chemical constituents of perspiration and bodily secretions: butyric acid, formic acid, acetic acid, phosphorus, and sodium chloride. The impressions, according to Mr. McDaniel, may be developed in colored backgrounds for lifting on dactyloscopic foil, examination by ultra-violet ray and orthochromatic photography, or may be fixed permanently on the object touched by the fingers.

Another device is a fuming apparatus for developing fingerprints on greasy surfaces, blotters, and fabrics, by automatically absorbing moisture from the material, a fresh supply of chemicals being replaced in paper cartridge form.

Other new products include an inkless system for the registration of fingerprints, which may be of interest in registering of female employees; and materials for fluorescent analysis under ultra-violet light of inks, papers, erasures, bloodstains, traces of bodily secretions, ballistics, etc.

Describe Determination of Thiamine in Pharmaceuticals

CHICAGO, Ill.—A new procedure for the assay of thiamine in pharmaceuticals has been described here. The technique involves the formation of a colored compound when the vitamin is reacted with diazotized ethyl paraaminobenzoate. The color can then be extracted by means of isoamyl alcohol for comparison in a photometer.

It is reported that this procedure has been successfully applied in the determination of thiamine in a wide variety of products.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

A new metal cleaner is described as suitable for use on all kinds of metal. It is said to coat the metal with an invisible oil film which affords protection during storage. Material can be used alone or diluted with water or kerosene. **(No. 630)**

U S I

A paper base plastic is said to have exceptionally high tensile strength, comparing favorably in this respect with aluminum on a weight basis. Plastic is also highly resistant to moisture and scratching, remains stable at high and low temperatures, and has a smooth surface that eliminates the need for special finishes, according to the manufacturer. **(No. 631)**

U S I

A wrapping material is described as especially useful for the protection of metal parts. It is said to be moisture-proof and resistant to oils and acids, and to aid in retarding oxidation and rusting. **(No. 632)**

U S I

Concrete repairs can be easily made with a new compound that has high compressive strength and extreme resiliency, according to the manufacturer. It is said that the compound can be applied without chipping and cutting out of the old surface, and that it will stand up under heavy loads. **(No. 633)**

U S I

An oil-absorbent compound is described as having many advantages for floor cleaning. According to the maker, it is more effective than wood shavings, reduces slip hazard, is odorless and dustless, can be reused, and will not burn when oil-soaked. **(No. 634)**

U S I

Two new titanium pigments of the rutile type have been placed on the market. Maker reports that they have high opacity and are non-chalking, and suggests their use in camouflage paints and war finishes for equipment that must stand exterior exposure. **(No. 635)**

U S I

A fast-drying linseed oil is said to have the advantage of quick bodying, and to be suitable for use in paint, varnish, ink, leather finishes, oilcloth, and linoleum. **(No. 636)**

U S I

Concentrated peppermint oil will soon be placed on the market as a possible substitute for menthol crystals and synthetic menthol. It is said that the material is produced by fractional redistillation of natural peppermint oil to remove a large percentage of the non-menthol constituents. **(No. 637)**

U S I

Frosting of Lucite, to produce lettering or ornamental designs, can be readily carried out by means of a simple process involving the use of ethanol, it is claimed in a recent patent. **(No. 638)**

U S I

A moisture remover is intended to allow only dry air to enter oil or chemical storage tanks when the level of the liquid drops, thus helping to prevent absorption of moisture by the liquid. Special types are said to be available for transformers and other equipment in which the presence of moisture is harmful. **(No. 639)**

U.S.I INDUSTRIAL CHEMICALS, INC.

60 EAST 42ND STREET, NEW YORK — BRANCHES IN ALL PRINCIPAL CITIES

CHEMICALS INDUSTRIAL ANTI- USI SERVICE TO INDUSTRY SOLVENTS ALCOHOLS FREEZE!

ALCOHOLS
Amyl Alcohol
Butanol (Normal Butyl Alcohol)
Fusel Oil—Refined
Ethanol (Ethyl Alcohol)
Specially Denatured—All regular and anhydrous formulas
Completely Denatured—all regular and anhydrous formulas
Pure—190 proof, C.P. 96%, Absolute
U.S.I. Denatured Alcohol Anti-freeze
*Super Pyro Anti-freeze
*Solox Proprietary Solvent
*Solox D-I De-icing Fluid

***ANSOLS**
Ansol M
Ansol PR
ACETIC ESTERS
Amyl Acetate
Butyl Acetate
Ethyl Acetate
OXALIC ESTERS
Butyl Oxalate
Ethyl Oxalate
PHTHALIC ESTERS
Amyl Phthalate
Butyl Phthalate
Ethyl Phthalate

OTHER ESTERS
*Diatol
Ethyl Carbonate
Ethyl Chloroformate
Ethyl Formate
INTERMEDIATES
Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-chloranilide
Acetoacet-ortho-toluidide
Acetoacet-para-chloranilide
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Sodium Oxalacetate

ETHERS
Ethyl Ether
Ethyl Ether Absolute—A.C.S.
OTHER PRODUCTS
Acetone
Collodions
*Curbay B-G
*Curbay Binders
*Curbay X (Powder)
Ethylene
Ethylene Glycol
Nitrocellulose Solutions
Potash, Agricultural
Urethan
*Vacatone

*Registered Trade Mark

Lime, hydrated, f.o.b. Gibsonburg, Ohio..ton. 8.50 - —
Hannibal, Mo.....ton. 8.50 - —
Keystone, Ala.....ton. 9.00 - —
Knoxville, Tenn.....ton. 9.00 - —
Le Roy, Minn.....ton.10.00 - —
Lime Crest, N. J.....ton. 8.50 - —
Limedale, Ark.....ton. 9.00 - —
Longview, Ala.....ton. 9.00 - —
Louisville, Ky.....ton.14.50 - —
Manistique, Mich....ton. 9.50 - —
Marblehead, Ohio....ton. 9.50 - —
Martinsburg, W. Va.ton. 9.00 - —
Mitchell, Ind.....ton. 9.00 - —
Newvals, Ala.....ton. 9.00 - —
Potoskey, Mich.....ton. 9.00 - —
Port Island, Mich....ton. 9.00 - —
Rapid City, S. D.....ton.12.00 - —
Rippleмead, Va.....ton. 9.00 - —
Rockland, Me.....ton. 9.00 - —
San Francisco, Cal..ton.16.00 - —
Springfield, Mo.....ton. 9.00 - —
Woodville, Ohio.....ton. 8.50 - —
York, Pa.....ton. 8.50 - —
spray, paper bgs., f.o.b.:—
Adams, Mass.....ton. 9.50 - —
Bellefonte, Pa.....ton. 9.00 - —
Carey, Ohio.....ton.11.00 - —
Farnams, Mass.....ton. 9.50 - —
Gibsonburg, Ohio.....ton.11.00 - —
Lime Crest, N. J.....ton. 8.50 - —
Marblehead, Ohio....ton.11.00 - —
Rockland, Me.....ton.10.00 - —
Scioto, Ohio.....ton.10.00 - —
Woodville, Ohio.....ton.11.00 - —
York, Pa.....ton. 9.00 - —
Lime salts (see Calcium).
Lime-sulphur, dry, dealers, bgs., c.l., E. of and incl. N. Dak., S. Dak., Neb., Kans., Okla., Tex..lb. No price
dms., same basis.....lb. No price
400 lbs. or more, bgs., same basis..lb. No price
dms., same basis.....lb. No price
less than 400 lbs., same basis..lb. No price
dms., same basis.....lb. No price
Solution, Zone 1, dms., consumers..gal. No price
Zone 2, tanks, dealers, wks. gal. No price
30-50, dms.....gal. No price
Zone 3, tanks, dealers, dlvd. gal. No price
30-50, dms.....gal. No price
Zone 4, tanks, dealers, wks. gal. No price
dms., wks., except Cal.gal. No price
Zone 5, dealers, dlvd.....gal. No price
dms.....gal. No price
Zone 6, tanks, dealers....gal. No price
30-50, dms.....gal. No price

Prices for lime sulphur solution are f.o.b. warehouse points, freight allowed. Zone 1 includes Ga., S. C., Ala., N. C., except the counties of Ashe, Surry, Stokes, Rockingham and Allegheny; Tenn., east of Tenn. river. Zone 2: New England States. Zone 3: Ark., Ohio., Ind., Ill., Ia., Ky., Wis., Minn., Mo. and Tenn. west of Tenn. river; Penn., eastern tier, and W. Va., western tier. Zone 4: West of Rocky Mountain, except southern California, which makes up Zone 5. Zone 6: N. Y. east of Herkimer, N. J., Md., Del., Va., Pa.—all counties lying east of the western boundary of Bedford, Blair, Center, Clinton and Potter, W. Va.—counties of Mineral Hampshire, Morgan, Berkeley, Jefferson, and Hardy, N. C.—counties of Ashe, Alleghany, Surry, Stokes and Rockingham.

Linalool, cns.....lb. 6.75 - 7.00
Linalyl acetate, 70% to 80%, cns., lb. 5.50 - 6.00
90%, cns.....lb. 6.50 - 6.75
92%, cns.....lb. 7.00 - 7.25
Linden flowers, bls.....lb. 1.10 - 1.60
without leaves, bls..... No stocks
Linseed meal, 32%, sacks, f.o.b. New York, Nov.-Jan. deliveries..ton.36.00 - —
same basis, f.o.b. Buffalo..ton.37.00 - —
Litharge, com'l powd., bbls., 20 tons, dlvd. Ala., Ariz., Ark., Colo., Fla., Ga., Idaho, La., Miss., Mont., Nev., N. Mex., Okla., Tex., Utah, Wyo., and E. of Cascade Mts. in Ore., and Wash..lb. .08¼- —
dlvd. other points.....lb. .08 - —
5 tons, dlvd., Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex. and W. of Cascade Mts. in Ore. and Wash...lb. .08¾- —
Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore. and Wash...lb. .09¼- —
Colo., Mont., N. Mex., Wyo..lb. .09 - —
Other points.....lb. .08½- —
smaller lots, dlvd. Ala., etc..lb. .09¼- —
Ariz., etc.....lb. .09¾- —
Colo., etc.....lb. .09½- —
Other points.....lb. .09 - —
Lithium bromide, bbls., 100 lbs., works, frt. equald..lb. 1.90 - —
50 lbs., works.....lb. 1.93 - —
25 lbs., works.....lb. 1.95 - —
Carbonate, NF VI, 250-lb. bbls. lb. 1.25 - —
100-lb. kgs.....lb. 1.30 - —
Chloride, 25-lb. jars.....lb. 1.65 - 1.70
Citrate, 250-lb. bbls.....lb. 1.40 - —
25-lb. dms.....lb. 1.45 - —
100-lb. kgs.....lb. 1.40 - —
Fluoride, bbls.....lb. 2.10 - 2.25
Hydroxide, jars.....lb. 1.35 - —
Iodide, 5-lb. bots.....lb. 5.20 - —
25-lb. jars.....lb. 5.05 - —
Lithopone,[1] titanated (high strength), bgs., c.l., (20 ton)..lb. .0560- —
smaller lots.....lb. .0585- —
bbls., c.l. (29 tons).....lb. .0585- —
smaller lots.....lb. .0610- —
ordinary, bgs., c.l. (20 tons).lb. .04¼- —
smaller lots.....lb. .04½- —
bbls., c.l. (20 tons).....lb. .04¼- —
smaller lots.....lb. .04¾- —

Lithopone in car lots is ¼c. per lb. higher delivered to the Pac. Cst. and in less car lots is ½c. higher ex whse., Pac. Cst.

Liverwort, leaves, bls.....lb. .60 - .62
Lobelia, herb, bls.....lb. .33 - .34
Logwood, cryst., No. 1, bgs....lb. .28 - —
No. 2, bgs.....lb. .26 - —
extract, liquid, No. 1, bbls...lb. .14 - —
No. 2, bbls.....lb. .13 - —
No. 3, bbls.....lb. .12½- —
No. 4, bbls.....lb. .10 - —
solid, No. 1, bxs.....lb. .23½- —
No. 2, bxs.....lb. .21½- —
Lovage root, dom., bls.....lb. .55 - .60
imported, bls.....lb. 4.50 - —
Lupulin, N.E., tins.....lb. 1.50 - 1.60
Lycopodium, cs.....lb. 7.50 - 8.00

M

Mace,[1] Banda, cs.....lb. .90 - .91
Siauw, No. 1, cs.....lb. .70 - .71
West Indian, cs.....lb. .70 - .71
Madder, Dutch, bbls.....lb. .24 - .30
Magnesia, arsenate,[6] dms.....lb. .18 - .20
Calcined, tech., USP, bbls., works..lb. .26 - —
Carbonate, tech., Zone 1, c.l., bgs..lb. .06¼- —
bbls.....lb. .07½- —
kgs.....lb. .08¾- —
l.c.l., bgs.....lb. .07¼- —
bbls.....lb. .08½- —
kgs.....lb. .09¾- —
Zone 2, c.l., bgs.....lb. .06¼- —
bbls.....lb. .07½- —
kgs.....lb. .08¾- —
l.c.l., bgs.....lb. .07 - —
bbls.....lb. .08¼- —
kgs.....lb. .09½- —
USP, Zone 1, c.l., bgs.....lb. .09 - —
bbls.....lb. .08½- —
kgs.....lb. .09¾- —
l.c.l., bgs.....lb. .09 - —
bbls.....lb. .09½- —
kgs.....lb. .10¾- —
Zone 2, c.l., bgs.....lb. .06½- —
bbls.....lb. .08½- —
kgs.....lb. .09¾- —
l.c.l., bgs.....lb. .08¾- —
bbls.....lb. .09¾- —
kgs.....lb. .10½- —
Other points.....lb. .08 - —

Magnesia:—Zone 1—Mass., Conn., R. I., N.Y., N.J., Pa., D. of C., Del. and Md., c.l. shipments, frt. equald. with Phillipsburg, Ambler, Plymouth Meeting, Valley Forge, and New York. On l.c.l. shipments, frt. alld., including dlvd. storedoor. Magnesia prices are f.o.b. Plymouth Meeting. Zone 2—Balance of N.S.; prices f.o.b. Plymouth Meeting, Ambler, Phillipsburg, Valley Forge, and New York.

Magnesium, chloride, anhyd., dom., bbls., dlvd..lb. .12 - —
flake, dom., bbls., works, c.l., ton.32.00 - —
l.c.l., bbls., works.....ton.39.00 -42.00
Fluoride, bbls.....lb. .40 - .50
Hydroxide, med.., 200-lb. bbls., lb. .25 - —
25-lb. dms.....lb. .30 - —
100-lb. kgs.....lb. .26 - —
Hypophosphite, cns., 100 lbs.lb. 1.45 - —
Oxide (see Calcined).
Palmitate, bbls.....lb. .33 - .35
Peroxide, 15%, dms., works..lb. 1.00 - 1.35
Silicate (see Talc).
Silicofluoride, bbls.....lb. .18 - .20
Stearate, bbls., ton lots.....lb. .31 - —
less than ton lots.....lb. .32 - —
Sulphate (see Epsom salt).
Trisilicate, 1,000-lb. contracts, dms..lb. .37 - —
smaller lots, dms.....lb. .42 - —
cs., 500-lb. lots.....lb. .40 - —
100-lb. lots.....lb. .42 - —
5-lb. cns.....lb. .60 - —
Magnesite, cal., dom., bgs., pwd., f.o.b. mines, Calif..ton.58.75 - —
l.c.l., dlvd., N. Y.....ton.84.00 -90.00
dead-burned, dom.,[5] bulk, c.l., f.o.b. Chewelah, Wash..ton.22.00 -40.50

Malva flowers, black, bls.....lb. 1.75 - 2.00
blue, bls.....lb. 2.25 - 2.50
Leaves, bls.....lb. .40 - .55
Manaca root, bls.....lb. .24 - .25
Mandrake root, bls.....lb. .18 - .19
Manganese acetate, dms.....lb. .26½- —
Arsenate,[6] bgs.....lb. .12 - .12½
Borate, tech., bbls.....lb. .15 - .17
Carbonate, bbls.....lb. .19 - —
Chloride, bbls.....lb. .14 Nom.
Dioxide, African, battery, 84-87%, bbls., 28-40 tons, works, ton.74.00 - —
5-15 tons, works.....ton.77.00 - —
½, 4 tons, works.....ton.82.00 - —
Caucasian, 85-90%, bbls., c.l., works..ton.74.00 - —
l.c.l., 5 tons, works....ton.77.00 - —
smaller lots, works..ton.82.00 - —
burlap bgs., c.l., works.. ton.71.75 - —
burlap bgs., c.l., works.. l.c.l., 5 tons, works....ton.74.75 - —
smaller lots, works..ton.79.75 - —
paper bgs., c.l., works..ton.70.00 - —
l.c.l., 5 tons, works....ton.73.00 - —
Glycerophosphate, bbls., bgs., 1,000-lb. lots..lb. 3.05 - 3.14
100-lb. lots.....lb. 3.15 - 3.25
cns., 25 lbs.....lb. 3.27 - 3.36
Hydrate, bbls., dlvd.....lb. .82 - —
Iodide, bots., 5 lbs.....lb. 5.70 - —
jars, 25 lbs.....lb. 5.55 - —
Linoleate, liquid, 4%, dms...lb. .20 - —
solid, precip., 8.2%, bbls...lb. .22 - —
Resinate, fused, 3½%, bbls..lb. .09 - .10½
precip. dms.....lb. .14½- .15½

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PHOTO BY U. S. ARMY SIGNAL CORPS

AFTER target practice . . . or after actual combat . . . a soldier's first duty is to see that his rifle is thoroughly cleaned.

The Army issues compact cans of Rifle Cleaning Fluid to make sure all corrosive action in the bore of the rifle is checked at the first opportunity . . . and Crown is proud that much of this cleansing compound is packed in Crown Cans.

So another small Crown Can is playing a big part in the war effort by helping to keep many Garand rifles in tip-top condition and ready for action all around the world!

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Division of Crown Cork and Seal Company

★ ★ ★ ★ ★ ★ ★ ★ ★

CROWN CAN

Manganese, sulphate, anhyd., ton lots, works..lb. .11¼- —
single dms, works.....lb. .11½- —
feed grade, 77-80%, c.l...lb. .05¾- —
l.c.l. .....lb. .06½- —
fertilizer, 65%, $MnSO_4$, bgs., c.l., dlvd. eastern points. ton.59.50 - —
l.c.l., bxs., sams basis or f.o.b. Balto. and Cincinnati..ton.66.50 - —
industrial grade, 80% $MnSO_4$, c.l..lb. .05 - —
l.c.l. .....lb. .05½- —
Mangrove bark, if, and when, available, bgs.....ton.60.00 - —
Manna flake, large, cs.....lb. No stocks
small, cs.....lb. 3.40 - 3.45
Mannitol, com'l grade, bbls., ton lots, works..lb. .35 - —
smaller lots, works.....lb. .40 - —
reagent grade, 50-lb. cs., or multiples, works..lb. .85 - —
Marjoram,[1] French, No. 1....lb. .84 - 1.15
Tunisian, bls.....lb. .60 - .65
Chilean .....lb. .43½- .44
In transit.....lb. .43 - .44
Matico leaves, bls.....lb. .22 - .29
Menthol, natural...cs.....lb.13.00 -13.50
synthetic, USP, cs.....lb.13.00 - —
technical, 60-lb. cs.....lb. 6.00 - —
smaller lots.....lb. 6.50 - —
Menthyl salicylate, tins, 100-lb. lots..lb. 3.00 - —
25-lb. lots.....lb. 3.10 - —
Mercurial ointment, 30%, pails, 50 lbs..lb. 1.44 - —
25 lbs.....lb. 1.46 - —
50%, pails, 50 lbs.....lb. 2.09 - —
25 lbs.....lb. 2.11 - —
Mercury (see Quicksilver).
Ammoniated (see White precipitate).
Bichloride[2] (see Corrosive sublimate).
Bisulphate,[2] 5-lb. bots.....lb. 3.02 - —
100-lb. fib. dms.....lb. 2.89 - —
25-lb. jars.....lb. 2.91 - —
Chloride[2] (see Calomel).
Cyanide,[2] cryst.....lb. 4.00 - 4.05
powd. .....lb. 4.00 - 4.05
Iodide,[2] red, NF, 5-lb. bots.lb. 4.65 - 4.71
100-lb. fib. dms.....lb. 4.60 - —
yellow, 5-lb. bots.....lb. 4.76 - 4.81
fib. dms., 100 lbs.....lb. 4.70 - —
Nitrate ointment (see Citrine ointment).
tech. (see Red, mercury oxide).
Oxide,[2] yellow, tech. (see Yellow, mercury oxide).
NF VI, fib. dms., 50 lbs. or more..lb. 3.38 - —
red,[2] NF (see Red precipitate).
Mercury and chalk,[2] 5-lb. ctns.lb. 1.98 - —
25-lb. fib. dms.....lb. 1.86 - 1.88
Mesityl oxide, dms., c.l., dlvd..lb. .12½- —
l.c.l., dlvd.....lb. .13 - —
Metal leaf, Japanese, pkgs. of 20 books (500 leaves), aluminums, 5½x5½ in..pkg. 2.50 - —
composition, 5½x5½ in.....pkg. 3.00 - —
gold, XX, deep, 23K, 3⅜x3⅜ in., pkg.15.00 - —
silver, 3⅜x3⅜ in.... .....pkg. 3.00 - —
Metanitroparatoluidin, bbls....lb. 1.05 - 1.10
Mteaphenylenediamine,[6] kgs...lb. .65 - —
Metatoluylenediamine,[6] kgs....lb. .70 - —
Methanol, natural,[1,5] producer group A, all grades, E. of Miss. R., tanks..gal. .60 - —
dms., c.l.....gal. .66 - —
l.c.l. .....gal. .76 - —
Methanol prices W. of Miss. R. are 3c. per gal higher.
pure, group B, tanks, frt. alld., Zone 1..gal. .50 - —
Zone 2.....gal. .52 - —
Zone 3.....gal. .54 - —
Zone 4.....gal. .54½- —
dms., c.l., Zone 1.....gal. .55½- —
Zone 2.....gal. .57½- —
Zone 3.....gal. .59½- —
Zone 4.....gal. .61½- —
l.c.l., Zone 1.....gal. .58½- —
Zone 2.....gal. .75½- —
Zone 3.....gal. .62½- —
Zone 4.....gal. .75½- —

Natural methanol sales zones are:—Zone 1, Conn., Del., D. of C., Ill., Ind., Iowa, Ky., Me., Md., Mass., Mich., Minn., Mo., N. H., N. J., N. Y., N. C., Ohio, Tenn., R. I., Vt., Va., W. Va., Wisc.; Zone 2, Ala., Ark., Col., Fla., Ga., Kan., La., Miss., Neb., N. D., Okla., S. C., S. D., Tex., Wyo.; Zone 3, Los A., San Fran., Seattle, Wash., Portland, Ore.; Zone 4, Ariz., Cal., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash.

Synthetic,[2,5] pure, dms., c.l., Zone 1, frt. alld..gal. .34½- —
2, frt. alld. or dlvd..gal. .36½- —
3, frt. alld.....gal. .38½- —
4, frt. alld.....gal. .40¼- —
l.c.l., Zone 1, frt. alld. or dlvd..gal. .37 - —
2, fr. alld.....gal. .42½- —
3, dlvd., S. F. and L. A., gal. .41 - —
4, frt. alld. or dlvd..gal. .52½- .56½
tanks, Zone 1, frt. alld..gal. .28 - —
2, frt. alld.....gal. .30 - —
3, frt. alld.....gal. .32 - —
4, frt. alld.....gal. .32½- —

Synthetic methanol sales zones are:—Zone 1, Conn., Del., D. C., Ill., Ind., Iowa, Ky., Me., Md., Mass., Mich., Minn., Mo., N. H., N. J., N.Y., N. C., Ohio, Penn., R. I., S. C., Tenn., Vt., Va., W. Va., Wis.; Zone 2, Ala., Ark., Col., Fla., Ga., Kans., La., Miss., Neb., N. D., Okla., S. D., Tex., Wyo.; Zone 3, Los Angeles, Cal.; San Francisco, Cal.; also (c.l. only) Portland, Ore., and Seattle, Wash.; Zone 4, Ariz., Cal., N. Mex., Mont., Nev., Idaho, Ore., Utah, Wash.

Methyl acetate, 97-99%, dms., c.l., E. of Miss. R..lb. .10¼- .12
W. of Miss. R.....lb. .11¼- .13
l.c.l., dms., dlvd. E. of Miss. R..lb. .11 - .14
W. of Miss. R.....lb. .12 - .13½
tanks, dlvd. E. of Miss. R. lb. .09½- —
W. of Miss. R.....lb. .10½- —
tech., dms., c.l., dlvd. E. of Miss. R..lb. .08 - .09
l.c.l., dlvd. E. of Miss. R.. lb. .07½- .11
dlvd. W. of Miss. R..lb. .07½- .10½
tanks, dlvd. E. of Miss. R. lb. .06 - —
W. of Miss. R.....lb. .07 - —
Acetoacetate, dms., c.l., works, frt. alld..lb. .29½- —
Acetone, natural, E. of Rockies, frt. alld., tanks..gal. .75 - —
dms., c.l., same basis...gal. .81 - —
l.c.l., same basis...gal. .86 - —

Methyl acetone prices on Pacific Coast are 3c. per gal. higher on tanks and 4c. per gal. higher on drums. car lots.

Synthetic, tanks, Zone 1..gal. .43 - —
Zone 2.....gal. .44½- —
Zone 3.....gal. .45½- —
Zone 4.....gal. .45½- —
dms., c.l., Zone 1.....gal. .51 - —
Zone 3.....gal. .53½- —
Zone 4.....gal. .54½- —

Metrylacetone, synthetic, dms., c.l., Zone 1.....gal. .54½- —
Zone 2.....gal. .57 - —
Zone 3.....gal. .58 - —
Zone 4.....gal. .59½- —
Alcohol (see Methanol).
Anthranilate, 100-lb. lots....lb. 2.20 - —
25-lb. lots, bots.....lb. 2.35 - —
Bromide, cns.....lb. .75 - .80
cyls. .....lb. .65 - .75
Benzoate, cns., 25 lbs.....lb. .70 - 1.10
Chloride, refrigeration, 500 lbs. and up, machine mfrs. and jobbers, cylinders..lb. .32 - —
service men and consumers, cyl..lb. .36 - —
60 to 400 lbs., cyl., mach. mfrs. and jobbers..lb. .36 - —
service men and consumers, cyl..lb. .40 - —
tanks, multi-unit, machine mfrs. and jobbers..lb. .31 - —
service men and consumers..lb. .35 - —

Methyl chloride quotations are spot or contract, effective July 1, for delivery to any common carrier point in United States. Prices above are in 60, 90 and 180-lb. cylinders. Prices on the 20-lb. cylinders are uniformly 10c. per pound higher than above prices.

Methyl, cinnamate, bls.....lb. 1.50 - 4.00
Formate, dms.....lb. .89 - —
Lactate, dms., l.c.l., dlvd...lb. .70 - —
Iodide, bots.....lb. 4.00 - 4.15
cns. .....lb. .37 - .40
Salicylate, dms.....lb. .35 - .37
Methylamyl ketone, dms., works, l.c.l..lb. .25 - —
smaller containers, same basis, lb. .28 - —
Methylcellulose, specl. vis. (4,000 cps.), fib. ctns., 2,000 lbs. or more, frt. alld..lb. .60 - —
100 to 1,999 lbs., frt. alld.lb. .65 - —
1 to 99 lbs., works.....lb. .70 - —
std. vis. (15-1,500 cps.), fib. ctns., 2,000 lbs. or more, frt. alld..lb. .53 - —
100 to 1,999 lbs., frt. alld.lb. .58 - —
1 to 99 lbs., works.....lb. .63 - —
Methylcyclohexane, 98-100%, dms., works..lb. .16 - —
Methylcyclohexanol, 98-100%, dms., works..lb. .23 - —
Methylcyclohexanone, 98 - 100%, dms., works..lb. .32 - —
Methylene blue, medcl., kgs., 100 lbs..lb. 2.00 - —
cns., 5 lbs.....lb. 2.35 - —
Chloride, refrigeration, dms., works..lb. .18 - .23
solvent, dms., works.....lb. .12 - .15
Methylethyl ketone, dms., c.l., frt. pd. E. of Rocky Mts..lb. .09 - —
l.c.l., same terms.....lb. .09½- —
tanks, same terms.....lb. .08 - —
Methylhexyl ketone, dms., tech., works..lb. .60 - —
Methylisobutyl ketone, dms., c.l., dlvd..lb. .12½- —
l.c.l., dlvd.....lb. .13 - —
tanks, dlvd.....lb. .11¼- —
Methylnaphthyl ketone, dom., crvst., cns..lb. 3.00 - 3.10
Metronite pigment, 120 mesh, containers extra, c.l., f.o.b. Milwaukee..ton. 9.00 - —
l.c.l., same basis.....ton.11.00 - —
180 mesh, containers extra, c.l., same basis..ton.11.00 - —
l.c.l., same basis.....ton.13.00 - —
250 mesh, containers extra, c.l., same basis..ton.12.00 - —
l.c.l., same basis.....ton.14.00 - —
325 mesh, containers extra, c.l., same basis..ton.15.00 - —
l.c.l., same basis.....ton.17.00 - —
400 mesh, containers extra, c.l., same basis..ton.17.50 - —
l.c.l., same basis.....ton.19.50 - —
Mica, dry grd., amber, No. 1 quality, c.l..ton.30.00 - —
l.c.l., 5,000 lbs.....ton.40.00 - —
1,000 lbs.....lb. .02 - —
500 lbs.....lb. .02½- —
100 lbs.....lb. .03 - —
refined, c.l.....ton.20.00 - —
l.c.l., 5,000 lbs.....ton.30.00 - —
paint, c.l.....ton.55.00 - —
l.c.l., 5,000 lbs.....ton.65.00 - —
white, No. 1 quality, c.l...ton.35.00 - —
l.c.l., 5,000 lbs.....ton.45.00 - —
1,000 lbs.....lb. .02½- —
500 lbs.....lb. .03 - —
roofing, c.l.....ton.29.00 - —
l.c.l., 5,000 lbs.....ton.39.00 - —
paint, c.l.....ton.60.00 - —
l.c.l., 5,000 lbs.....ton.70.00 - —
wet grd., paint or lacquer, c.l., lb. .04½- —
l.c.l. .....lb. .05 - —
l.c.l. .....lb. .05 - —
rubber, c.l.....lb. .04¼- —
l.c.l. .....lb. .04¾- —
Mica, biotite, c.l.....lb. .03¾- —
l.c.l. .....lb. .04¼- —

Mica, dry grd., is quoted in bags at the works: wet grd. mica in car-load lots is frt. alld. E., and in less car-load lots ex whse. or frt. alld. E. Prices of the wet grd. are ½c. per pound higher west of the Mississippi.

Milk, powder, skimmed, roller, bbls., c.l..lb. .14½- —
l.c.l. .....lb. .15½- .16
spray, bbls., c.l.....lb. .15½- —
l.c.l. .....lb. .16½- .17
whole, roller, bbls., c.l....lb. .29 - —
l.c.l. .....lb. .29½- —
spray, bbls., c.l.....lb. .30 - —
l.c.l. .....lb. .30½- —
Millet seed, yell-w, bgs.....lb. .03¼- .03½
early fortune, bgs.....lb. .03¼- .03½
hulled, bgs... .....lb. .07 - .12
Mineral spirits (see Petroleum thinners and VM & P naphtha).
Molasses, blackstrap, tanks, f.o.b. No. Atlantic ports..gal. .16 - .17
f.o.b. Gulf ports.....gal. .16 - .20
Molybdate orange (see Orange, molybdate).
Molybdenum metal,[6] kgs., 99%, powd..lb. 2.60 - 3.00
trioxide[6], pure, kgs., basis Mo. content, works..lb. .95 - —
technical, kgs., basis Mo. content, works..lb. .80 - —
Monoamylamine, dms., basis 100%, c.l., works..lb. .61 - —
l.c.l., works.....lb. .64 - —
Monoamylnaphthalene, l.c.l., dms., works..lb. .17 - —
Monobutylamine, dms., basis 100%, c.l., works..lb. .48 - —
l.c.l., works.....lb. .51 - —
Monoethanolamine, dms., c.l., works..lb. .24 - —
l.c.l., dms.....lb. .25 - —
tanks .....lb. .23 - —
Monoethylamine, basis 100%, dms., c.l., works..lb. .43 - —
l.c.l., works.....lb. .46 - —
Monochlorobenzene, dms., c.l..lb. .05½- —
55 gal.....lb. .07 - —
10 gal.....lb. .08 - —
5 gal.....lb. .09 - —
tanks .....lb. .05 - —
Monoethylaniliin, dms.....lb. .47 - —
Monomethylamine, dms., c.l., l.c.l., dlvd..lb. .65 - —
Monomethylpara-aminophenol-sulphate, dms..lb. 3.75 - 4.00
Monosodiumphosphate (see Soda phosphate monobasic).
Morphine, bots., 5 ozs.....oz.11.10 - —
cns., 25 ozs.....oz.10.90 - —
Acetate, bots., 5 ozs.....oz. 9.00 - —
bots., 25 ozs.....oz. 8.80 - —
Ethylhydrochloride, bots., 5 ozs., oz.10.75 - —
cns., 25 ozs.....oz.10.55 - —
Hydrobromide, 5 ozs.....oz. 8.95 - —
cns., 25 ozs.....oz. 8.75 - —
Hydrochloride, powd., 5-oz. bots., oz. 9.00 - —
25-oz. cns.....oz. 8.80 - —
Sulphate, bots., 5 ozs.....oz. 9.00 - —
cns., 25 ozs.....oz. 8.80 - —
Morpholine, dms., 55 gals., l.c.l., works..lb. .67 - —
smaller containers, works....lb. .75 - —
Mullein leaves, cns.....lb. .12 - .13
flowers, cns.....lb. 1.75 - 2.10
Musk, nat., Tonquin, grains, bots., oz.87.00 -89.00
synth., ambrette, cns., 100 lbs. or more..lb. 4.00 - 9.00
25 lbs. to 75 lbs.....lb. 4.10 - 9.10
5 lbs. .....lb. 4.25 - 9.45
ketone, cns., 100 lbs. or more. lb. 4.15 - 9.25
25 lbs. to 75 lbs.....lb. 4.25 - 9.35
5 lbs. .....lb. 4.40 - 9.70
xylol, cns., 100 lbs. or more..lb. 1.40 - 2.50
25 lbs. to 75 lbs.....lb. 1.50 - 2.60
5 lbs. .....lb. 1.65 - 2.90
Musk root, bls.....lb. 2.25 - 2.30
Mustard seed, California, brown, good, bgs.....lb. .15 - .15½
yellow, bgs.....lb. .08 - .08½
Montana, yellow, bgs.....lb. .06¼- .06¾
Roumanian, yellow.....lb. .05½- .06
Washington, yellow, bgs.....lb. .06¼- .06¾
Myrobalans, J1, bgs., f.a.s...ton. No prices
J2, bgs., f.a.s.....ton. No prices
Extract, liquid, 25%, bbls....lb. No prices
solid, 50%, bbls.....lb. No prices
powdered, bbls.....lb. No prices

N

Naphtha, Painters (see Petroleum, naphtha, V. M. & P.).
Solvent (see S).
Naphthalene, crude,[6] dom., 74 deg., tanks, works..100 lbs. 2.75 - —
78 deg., tanks, works..100 lbs. 3.00 - —
Naphthalene, refined, balls or flakes, bbls., wholesalers and jobbers, f.o.b. works..lb. .08 - —
50-lb. cs., same basis.....lb. .08¼- —
pkgs. (16-oz.), same basis..lb. .08½- —
(12 oz.), same basis.....pkg. .07 - —
Neocinchophen, standard density, 100-lb. lots, dms..lb. 3.50 - —
50-lb. lots.....lb. 3.55 - —
25-lb. lots.....lb. 3.60 - —

Heavy density neocinchophen is 20c. per lb. higher.

Nerolin, cryst., cns.....lb. 1.70 - 2.00
Niacin (see Acid, nicotinic).
Nickel[6] carbonate, bbls.....lb. .36 - .36½
Chloride,[6] bbls.....lb. .19 - .20
Cyanide,[6] 100 lbs., dms.....lb. 1.40 - —
25-lb. bot.....lb. 1.50 - —
Oxide,[6] black, bbls.....lb. .35 - .38
Salt,[6] bbls.....lb. .13 - .13½
Nicotine,[3] sulphate, 40%, dms., works, frt. alld..lb. .70[3] - —
10-lb. tins.....lb. .86½- —
Niger seed, bgs.....lb. .15 - .15½
Nikethamide, 25 lbs. or more, bots..lb.18.00 - —
under 25-lb. lots, bots.....lb.19.00 - —
Nitercake, bulk, works.....ton.16.00 - —
Nitrobenzene, dbl. dist., dms., c.l. lb. .08 - —
l.c.l. .....lb. .09 - —
tanks .....lb. .07 - —
Nitrocellulose, ester-soluble,[6] 30-35, ¼, ½ sec., bbls., dry weight, works..lb. .26 - —
5-6, 15-20 sec. and higher, bbls., dry weight, works..lb. .25 - —

Nitrocellulose prices are quoted on the basis of dry weight; denatured alcohol used in manufacture is charged extra. Barrels are to be paid for extra, but are returnable.

Nitroethane, dms., l.c.l., works.lb. .25 - —
Nitrogenous fertilizer material, dom., 10% ammon., bulk, f.o.b. Carrollville, Wis...unit-ton. 3.00 Nom.
Chemical, Ill., Nov.-Dec. shipments..unit-ton. 2.90 - —
Norfolk, Va.....unit-ton. No prices
Nitromethane, dms., l.c.l., wks.lb. .25 - —
Nitropropane I, dms, l.c.l., works, lb. .25 - —
II, dms, same basis.....lb. .25 - —
Nutgalls,[6] Aleppo, bgs., oz....lb. No price
Chinese, whole.....lb. .43 Nom.
Extract (see Gall extract).
Nutmegs,[1] E. I., bgs., cs.....lb. .42 - .43
West Indian, bgs.....lb. .37 - .38
Nux Vomica, bls.....lb. .09 - .11
powd., bbls., bxs.....lb. .12 - .16

O

Oakbark extract, 25% tan., bbls., c.l., works..lb. .0385- —
tanks .....lb. .0325- —
Ocher (see Yellow)
Octane,[1] 100-140° C., industrial grade, dms., c.l., G.3...gal. .15½- —
l.c.l., G.3.....gal. .29 - —
10 gals., G.3.....gal. .55 - —
tanks, G.3.....gal. .13 - —
Octanol, normal, tech., 360-lb. dms., dlvd..lb. .85 - —
Oil, almond, bitter, artif. (see Benzaldehyde)
natural, USP, bots.....lb. 5.00 - 5.25
sweet, true, exp., dms., cns., lb. 2.20 - 2.25
Amber, crude, cns.....lb. No stocks
refd., cns.....lb. .52 - —
Angelica, root, bots.....lb.150.00 - —
seed, bots.....lb.120.00 -150.00
Anilin (see A).
Anise, USP, cns., dms.....lb. 2.75 - 3.00
Apricot, kernel, cns.....lb. .45 - .48
Avocado, cns., dms.....lb. 1.00 - 1.25
Babassu,[1,5] tanks.....lb. .1110- —
Bay, W. I., 50-55% phenols, cns..lb. 1.55 - 2.10
Porto Rican, 55-60% phenols, cns..lb. 1.65 - 2.10
Bergamot, artif., cns.....lb. 2.25 - 6.50
natural, coppers.....lb.32.00 -35.00
Birch (see Oil, sweet, birch).
Birch tar, crude, cns.....lb. 2.00 - —
rectified, cns.....lb. 3.00 - —
Bois de Rose, Brazil, cns....lb. 4.45 - 4.55
Mexican (see Linaloe, wood).
Bone, dms., works.....gal. .65 - .70
Cade, USP IX (see Oil, juniper tar).
Cajeput, tech., dms.....lb. 2.10 - 2.25
free from metal, cns.....lb. 2.15 - 2.40
redistilled, cns.....lb. 2.45 - 3.00
Calamus, cns.....lb. No stocks
Camphor, sassafrassy, cns...lb. .45 - .46
dms. .....lb. No prices.
white, cans .....lb. .48 - —
dms. .....lb. No prices.
Cananga, native, cns.....lb.16.00 -17.00
rectified, cns.....lb.17.00 -18.00
Capsicum (oleoresin), USP VIII, cns..lb. 3.75 - 4.75
Caraway, USP, cns.....lb.16.75 -17.50
Cardamom, bots. .....lb.25.00 -34.00
Cassia, USP, cns.....lb.10.50 -12.00
Castor,[1,6] blown, dms., returnable, c.l..lb. .13¼- —
l.c.l. .....lb. .16 - —
cold pressed, USP, bbls., c.l., lb. .14 - —
l.c.l. .....lb. .14½- —
cns. (1-gal.), l.c.l.....lb. .17¾- —
cns. (1-gal.), l.c.l.....lb. .15¾- —
dms. (returnable), c.l...lb. .13¾- —
l.c.l. .....lb. .14½- —
tanks .....lb. .13 - —
dehydrated, dms. .....lb. .1860- —
l.c.l. .....lb. .1900- —
extracted, No. 3, tech., bbls., c.l..lb. .13¾- —
l.c.l. .....lb. .14¼- —
dms. (returnable), c.l....lb. .13½- —
l.c.l. .....lb. .14¼- —
tanks .....lb. .12¾- —
sulphonated, 50% (43% fat), dms., c.l..lb. .10 - —
l.c.l. .....lb. .11 - —
75% (63% fat), dms., c.l..lb. .12¼- —
l.c.l. .....lb. .13½- —
80% (68% fat), dms., c.l..lb. .12½- —
l.c.l. .....lb. .13½- —
Cedarleaf, USP, cns.....lb. 1.20 - 1.30
technical, cns.....lb. .80 - .90
Cedarwood, Southern, dms...lb. .75 - .80
Celery, bots.....lb.30.00 -40.00
Chaulmoogra, USP, cns.....lb. .68 - —
Chinawood,[1,5] dms.....lb. .39 - —
tanks .....lb. .3875- —
Cinnamon, bark oil, bots....lb. No prices
leaf oil, dms.....lb. 2.50 - —
Citronella, Ceylon, cns.....lb. 1.15 - 1.20
dms. .....lb. 1.10 - 1.15
Java, cns., dms.....lb. No prices
Clove, makers, USP, cns.....lb. 1.85 - 2.10
dms. .....lb. 1.75 - 2.00
Coconut,[1,5] Manila, crude, bulk, c.i.f..lb. .0835- —
edible, ex tax.....lb. .0985- —
Cod,[5] Newf., dms.....gal. .90 - —
tanks .....gal. .85 - —
Codliver,[5] med., USP, 30-gal. bbls. or dms..bbl.80 00 -88.00
Coriander, bots.....lb.28.00 -35.25
Corn,[1,5] crude, tanks, works..lb. .12¾- —
refd., bbls.....lb. .15½ Nom.
Cottonseed,[5] cooking, bbls....lb. .16¾- —
salad, bbls.....lb. .17 - —
Creosote (see C).
Croton, NF, cns.....lb. 4.00 - 4.10
Cubeb, USP, cns.....lb. 4.70 - 6.80
Crude (see Petroleum, crude)
Cumin, bots.....lb.10.00 -12.00
Cypress, bots.....lb.12.00 - —
Degras (see D).
Dillseed, bots.....lb. 8.00 - 8.50
weed, bots.....lb. 6.00 - 6.25
Dip (see D).
Erigeron, cns.....lb. 2.10 - 3.85
Eucalyptus, cns.....lb. .99 - 1.06
dms. .....lb. .95 - 1.02
Fennel, sweet, cns.....lb. 4.20 - 4.50
Fishliver,[1,5] 6,000 to under 60,000 units per gram—per million unit. .14 - —
60,000 to under 200,000 units per gram—per million units. .20 - —
200,000 or more units per gram—per million units. .30 - —
Gaultheria (see Oil, wintergreen leaf)
Geranium, Algerian, rose, cns. lb.16.50 -17.00
Bourbon, cns.....lb.20.00 -24.00
Turkish (see Palmarosa).
Grapefruit, cns.....lb. 1.65 - 2.25
Grapeseed, dom., dms.....lb. .35 - .36
imported, dms.....lb. .20 - .25
Ginger, dist., bots.....lb.19.00 -20.00
Guaiac wood, concrete, bots.lb. 4.50 - 4.75
Hemlock, cns.....lb. 1.15 - 1.60
Juniper berry, cns.....lb.12.00 -18.00
wood, tech., cns.....lb. 1.50 - 1.55
Juniper, tar, USP XI, dms..lb. 1.15 - 1.20
Lard,[5] common, 1, bbls.....lb. .14⅝- —
extra, No. 1, bbls.....lb. .14⅝- —
winter, strained, bbls.....lb. .15½- —
prime, burning, bbls.....lb. .16 - —
prime, ined., bbls.....lb. .15¾- —
Laurel, bots.....lb. 5.00 Nom.
Lavandin, cns., 25 lbs.....lb. 3.75 - 7.00
Lavender, flower, French, cns. lb. 8.50 -12.00
garden, cns.....lb. .55 - .70
spike, Spanish, tech., cns..lb. 4.25 - 6.85
dms. .....lb. 4.15 - 6.75
Lemon, Calif., cns.....lb. 3.25 - —
Messina, coppers, cns..... No stocks
Terpeneless, Type 1.....lb.11.75 -15.00
Type 2.....lb. 9.50 -13.00
Uruguay, 10 kilo cans.....lb. 5.50 - 5.75
Lemongrass, cns., dms.....lb. 1.50 - 1.75
Lime, dist., Mex., cns.....lb. 8.00 - 9.50
W. I., cns.....lb. 9.25 - 9.50
expressed, cns.....lb.12.50 -13.50
Lignaloe, wood, Mexican, cns.. lb. 4.00 - 4.25
Brazilian (see Bois de rose).
Linseed, raw, dms., c.l.....lb. .1330- .1350
l.c.l., 10 or more.....lb. .1350- .1370
5 to 9.....lb. .1390- .1410
less than 5.....lb. .1410- .1430
tanks .....lb. .1240- .1260

Less .005c. per lb. for drum shipments.
Boiled linseed oil, .004 over raw.

Oil, lubricating,[1] at refinery, ex tax, California, neutrals, pale, 200-600 vis., 2¼-4, tanks..gal.	.07¼-	.11
red, 200-900 vis., 4-6½ plus, tanks..gal.	.07¼-	.11½
Group 3, bright stock, 150-160 vis., 0-25 pour, tanks, gal.	.22½-	.23
neutral, 150-300 vis., 3, 0-10 pour, tanks..gal.	.14½-	.18
200-280 vis., 3, 15-25 pour, tanks..gal.	.15 -	.17½
Pennsylvania,[2] bright stocks, 8 color, 140-150 vis., 10-25 pour, tanks, gal.	.25 -	.30½
cylinder oils, 600-630 flash, tanks..gal.	.16 -	.17
600-650 steam ref'd, tanks..gal.	.15 -	.15½
neutral, 70° F., 3 color, 150 vis., 0.25 pour, tanks, gal.	.31 -	.38½
200 vis., 0.25 pour, tanks, gal.	.33 -	.40½
Mace, dist., cns., dms.....lb.	4.50 -	6.00
Mandarin, Brazilian, cns.....lb.	9.00 -	10.00
Italian, coppers.....lb.	15.00	Nom.
Menhaden,[1,3] crude, tanks, Balto..lb.	.0880-	—
ref'd, alkali, ret. dms.....lb.	.1270-	.1290
kettle-bodied, ret. dms....lb.	.1370-	.1390
light-pressed, ret. dms...lb.	.1170-	.1190
tanks .....lb.	.1090-	.1100
Mineral, white (see Oil, white mineral).		
Mustard, artif., USP, bots., cns..lb.	1.60 -	1.70
expressed, dms.....lb.	.13 -	—
Neatsfoot,[6] pure, bbls.....lb.	.19¼-	—
Neroli, bots.....lb.	300.00-	375.00
Nutmeg, dist., cns., dms.....lb.	4.50 -	6.00
Oiticica,[1,5] liquid, dms.....lb.	.25 -	—
solid, dms.....lb.	.23 -	—
Oleo,[3] 1, bbls.....lb.	.13¾-	—
2, bbls.....lb.	.13 -	—
Olibanum, bots.....lb.	4.50 -	—
Olive,[5] denat., dms.....gal.	3.50 -	4.00
edible, Calif., dms.....gal.	4.00 -	4.25
imported, dms.....gal.	4.25 -	4.50
foots, dms.....lb.	.19	Nom.
sulphonated, 50% (40% fat), dms. c.l..lb.	No prices	
l.c.l. .....lb.	No prices	
35% (68% fat), dms., c.l. lb.	No prices	
l.c.l .....lb.	No prices	
80% (68% fat), dms., c.l..lb.	No prices	
l.c.l. .....lb.	No prices	
Orange, sweet, dist., cs.....lb.	1.70 -	—
expressed, Calif., cns.....lb.	3.25 -	—
Argentine, 10-kilo cns....lb.	3.00 -	3.25
Brazilian, cns.....lb.	1.75 -	1.80
Florida, cns., dms.....lb.	2.25 -	2.75
Messina, USP, coppers....lb.	No stocks	
Mexican, sponge-pressed, cns. lb.	5.50 -	5.75
West Indian, cns.....lb.	6.00 -	6.25
terpeneless .....lb.	35.00 -	175.00
Origanum, Spanish, cs.....lb.	2.70 -	3.25
Palmarosa, cns.....lb.	5.25 -	5.50
Palm,[1,3] Niger, bulk, c.i.f...lb.	.0825-	—
Paraffin,[1] 320° flash, 60-70 vis., tanks, G.3..gal.	.03¼-	—
350° flash, 70-80@100 vis., 0/10 pour..gal.	.08 -	—
100-100 vis., 0/10 pour....gal.	.08½-	—
100-100 vis., 10/25 pour....gal.	.08¼-	—
80-85 vis., bbls., extra, Ind. refy..gal.	.12 -	—
100-105 vis., bbls., extra, Ind. refy..gal.	.14 -	—
300[1] flash, 100-110 vis., tanks, G.3..gal.	.05¾-	—
Patchouli, cns.....lb.	6.50 -	6.75
Peanut,[1,3] crude, tanks, mill..lb.	.13 -	—
refd., edible, bbls.....lb.	.17	Nom.
Pennyroyal, dom., cns.....lb.	2.90 -	—
import, cns.....lb.	3.00 -	3.25
Peppermint, natural, cns., dms. lb.	5.50 -	5.75
redist., USP, cns., dms....lb.	6.00 -	6.25
Perilla,[1,3] crude, dms.....lb.	.2450-	—
Petitgrain, Paraguay, cns....lb.	1.80 -	2.05
dms. .....lb.	1.75 -	2.00
Pimento berry, cns.....lb.	8.75 -	—
leaf, cns.....lb.	4.75 -	5.25
Pine, tanks, works.....gal.	.55 -	—
Pineneedle, Siberian, cns.....lb.	3.00 -	3.25
Putty,[2] bbls., E. Segundo, Richmond, Cal..gal.	.22½-	—
contracts .....gal.	.19½-	—
Whiting, Ind.....gal.	*.34 -	—
dms., c.l., Boston, Providence, gal.	.25 -	—
l.c.l., same basis.....gal.	.27 -	—
tanks, same basis.....gal.	.18 -	—
Martinez, Cal.....gal.	.28 -	—

* Extra for bbls. but subject to quantity discounts, ranging from 2c. to 5c. per gallon, according to amount purchased.

Rapeseed,[1,3] denat., tanks...lb.	.1150-	—
blown, dms.....lb.	.18 -	.18½
Red,[3] dms., dlvd.....lb.	.11¾-	.12¾
tanks, dlvd.....lb.	.11 -	—
Rose, natural, coppers.....oz.	30.00	-35.00
Rosemary, Spanish, cns.....lb.	2.15 -	2.20
dms. .....lb.	2.00 -	2.05
Rosin, 1st rectified, dms....gal.	.57 -	—
2d rectified, dms.....gal.	.59 -	—
3d rectified, dms.....gal.	.63 -	—
Rue, bots.....lb.	8.25 -	8.50
Sage, Spanish, cns.....lb.	3.50 -	3.75
Sandalwood, domestic, distilled, UP, cns..lb.	5.75 -	6.75
Mysore, cns., case lots.....lb.	7.00 -	7.25
Sardine, crude,[1,6] tanks, Pac. Coast..lb.	.0890-	—
ref'd, alkali, ret. dms.....lb.	.1270-	.1290
kettle-bodied, ret. dms...lb.	.1370-	.1390
light-pressed, ret. dms...lb.	.1170-	.1190
tanks .....lb.	.1090-	.1100
Sassafras, artif., cns.....lb.	2.00 -	—
natural, dom., cns., dms...lb.	2.00 -	2.20
Savin, cns.....lb.	16.00 -	—
Savory, cns.....lb.	No stock	
Sesame, tanks, Coast.....lb.	.15	Nom.
Shingle stain, bbls., c.l., works, gal.	.19 -	—
l.c.l., works.....gal.	.20 -	—
tanks, works.....gal.	.14 -	—
Snakeroot, Canada, cns.....lb.	12.50	-12.75
Soybean,[6] dom., crude, dms..lb.	.13	Nom.
tanks .....lb.	.12½	Nom.
refd., dms.....lb.	.14½	Nom.
tanks .....lb.	.13¾-	—
Spearmint, dms.....lb.	3.00 -	3.20
Oil, sperm,[6] bleach, 38°, dms. lb.	.1301-	—
45°, dms.....lb.	.1278-	—
natural, dms.....lb.	.1223-	—
Spruce, cns., dms.....lb.	1.30 -	1.35
Sunflower,[1,3] tanks.....lb.	.1430-	—
Sweet birch, North, cns.....lb.	5.00 -	5.65
South, cns.....lb.	3.25 -	4.75
Tall, crude, dms., c.l., works.. ton.	55.00 -	—
l.c.l., works.....ton.	60.00	-65.00
tanks, works.....ton.	40.00 -	—
refined, dms., c.l., works...lb.	.05 -	—
l.c.l., works.....lb.	.05½-	—
tanks, works.....lb.	.04½-	—
Tallow,[6] acidless, bbls.....lb.	.14¼-	—
tanks .....lb.	.13¾-	—

Oil, tansy, cns.....lb.	3.30 -	3.90
Tar, pine, com'l, dms., c.l., dlvd. E. cities..gal.	.33 -	—
l.c.l., E. cities.....gal.	.30 -	—
tanks, dlvd. E. cities..gal.	.24¼-	—
rectified, USP, bbls., l.c.l., dlvd. E. cities..gal.	.60 -	—
Tar acid (see T).		
Teaseed,[1] crude, dms.....lb.	.29	Nom.
ref'd, dms.....lb.	.32	Nom.
Thyme, NF, red, cns.....lb.	2.60 -	3.50
white, cns.....lb.	2.85 -	4.00
Tong (see Oil, Chinawood).		
Turkey, red (see Oil, castor, sulphonated).		
Turpentine (see T).		
Turtle, cns.....gal.	8.50 -	—
Vetiver, Java, bots.....lb.	37.50	-40.00
Whale, ref., natural, dms....lb.	.1070-	—
winter, bleach, dms.....lb.	.1110-	—
Wheat germ., 100 gal. dms., cont., dlvd.....gal.	10.00 -	—
25 gal., dms.....gal.	12.50 -	—
10 gal., dms.....gal.	13.50 -	—
5 gal., dms.....gal.	14.00 -	—
1 gal., cns.....gal.	15.00 -	—
White, mineral, dom., f.o.b. N. Y., tech., 50-65 vis., returnable dms., c.l..gal.	.36 -	—
l.c.l. .....gal.	.42 -	.45
65/75 vis., c.l.....gal.	.36 -	—
l.c.l. .....gal.	.42 -	.45
USP, 80/90 vis., c.l.....gal.	.39 -	—
l.c.l. .....gal.	.45 -	.48
95/105 vis., c.l.....gal.	.44½-	—
l.c.l. .....gal.	.50½-	.53½
125/135 vis., c.l.....gal.	.49 -	—
l.c.l. .....gal.	.53 -	.58
145/155 vis., c.l.....gal.	.51 -	—
l.c.l. .....gal.	.57 -	.60

Oil, white mineral, dom., f.o.b. N. Y., USP—		
170/185 vis., c.l.....gal.	.54½-	—
l.c.l. .....gal.	.60½-	.63½
200/210 vis., c.l.....gal.	.58 -	—
l.c.l. .....gal.	.64 -	.67
320/330 vis., c.l.....gal.	.65 -	—
l.c.l. .....gal.	.71 -	.74
325/345 vis., c.l.....gal.	.69 -	—
l.c.l. .....gal.	.72 -	.75
f.o.b. San Francisco, USP, 55 vis., returnable bbls., c.l...gal.	.40 -	—
5 bbls.....gal.	.45 -	—
85 vis., c.l.....gal.	.40 -	—
5 bbls.....gal.	.45 -	—
100 vis., c.l.....gal.	.40½-	—
5 bbls.....gal.	.54½-	—
145 vis., c.l.....gal.	.57 -	—
5 bbls.....gal.	.62 -	—
180 vis., c.l.....gal.	.60½-	—
5 bbls.....gal.	.65½-	—
340 vis., c.l.....gal.	.72 -	—
5 bbls.....gal.	.77 -	—
Russian .....gal.	No prices	
Wintergreen, natural, North, cns..lb.	4.75 -	7.50
South, cns.....lb.	4.00 -	6.25
synth. (see Methyl salicylate).		
Wood (see Oil, Chinawood).		
Wormseed, cns.....lb.	2.85 -	3.00
Wormwood, cns.....lb.	4.35 -	5.50
Ylang-ylang, Bourb., bots., cns., lb.	No stocks	
Manila, bots.....lb.	45.00 -	—
Olivine, aggregate, c.l., mines, ton.	7.00	-11.00
Lumps, same basis.....ton.	7.00 -	—
Spalls, same basis.....ton.	5.00 -	—
crushed, 8 mesh, bulk, c.l., works..ton.	8.00 -	—

Olivine, crushed, 8 mesh, paper bgs., c.l., works..ton.	9.50 -	—
325 mesh, c.l., mines....ton.	20.00 -	—
200 mesh, c.l., mines....ton.	17.00 -	—
100 mesh, c.l., mines....ton.	15.00 -	—
20 mesh to dust.....ton.	12.00 -	—
Opium gum, USP, 50-lb. lots, cns..lb.	13 00 -	—
25-lb. lots, cns.....lb.	13.25 -	—
5-lb. lots, cns.....lb.	13.50 -	—
1-lb. lots, cns.....lb.	13.65 -	—
Prices on powd. and gran. USP opium are $1.50 per pound higher.		
Orange, Lake, Persian, bbls...lb.	.30 -	.45
Mineral, Amer., bbls., 5 tons, dlvd., Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex. and W. of Cascade Mts. in Ore. and Wash.....lb.	.12¼-	—
Ariz., Idaho, Nev., Utah and E. of Cascade Mts., in Ore., Wash.....lb.	.12¾-	—
Colo., Mont., N.M., Wyo., lb.	.12¼-	—
dlvd. other points...lb.	.12 -	—
smaller lots, dlvd., Ala. etc..lb.	.12¾-	—
Ariz., etc.....lb.	.13¼-	—
Colo., Mont., N.M., Wyo., lb.	.13 -	—
Other points.....lb.	12½-	—
French, Tours, casks, ex dock, lb.	No prices	
kgs., ex dock.....lb.	No prices	
Molybdate,[6] bbls.....lb.	.31 -	—
Toner, bbls.....lb.	.80 -	1.05
Orangeflower petals, cs.....lb.	.45 -	.75

New Synthetic Gum Jellies with COLLORESIN

A Water Soluble Methyl Cellulose

Dimethyl Ether of Cellulose, a white fibrous solid which dissolves in water.

Resistant to the action of alkalies and dilute acids giving a clear colorless solution.

Colloresin is of interest to the manufacturer of cosmetics and pharmaceuticals as a replacement for natural gums and in the manufacture of Liquid Dentifrices, Tooth Pastes, Creams, Soapless Shampoos, Hair Grooms, Wave Sets, Brushless Shaving Creams, etc. Tentative formulas for the above are available as well as instructions as to methods of its employment.

Available in seven viscosities.

GL 4C

Non Toxic Emulsifying, Detergent, Foaming, Wetting Agent

A protein - amino acid condensate exceptionally fine for liquid Dentifrices, Soapless Shampoos, Brushless Shaving Creams, etc.

GL 4C may be readily used with Colloresin in the manufacture of these products.

Requests for samples on your firm's letterhead will be promptly answered.

Aromatics Division
GENERAL DRUG COMPANY
644 Pacific St., Brooklyn, N. Y.
9 S. CLINTON STREET, CHICAGO 1019 ELLIOTT STREET, W., WINDSOR, ONT.

Orange peel, bitter, bbls.....lb. .30 - .31
sweet, bls.....lb. .15 - .17
Haitian, bgs.....lb. .09 - .10
Oregano, Mexican, bgs.....lb. .17 - .18
Orris root, whole.....lb. 1.35 - 1.40
powd., bbls., bxs.....lb. 1.45 - 1.50
Orthoamylphenol, l.c.l., dms., works..lb. .25 - —
Orthoanisidin, bbls.....lb. .70 - —
Orthochloroanilin, dms.....lb. .60 - .70
Orthochlorophenol, dms.....lb. .32 - —
Orthocresol,[6] 30.4°C. Min. M. P., dms., c.l., works..lb. .17½- .18
l.c.l., same basis.....lb. .18 - .18½
29° Min. M. P., dms., c.l., works..lb .16½- .17
l.c.l., same basis.....lb. .17 - .17½
Orthodichlorobenzene, dms., c.l., works, frt. alld. E. of Rockies..lb. .06 - .07½
l.c.l., same basis.....lb. .07 - .08½
100-lb. tins, same basis...lb. .08 - .09
50-lb. tins, same basis..lb. .09 - .10
tanks, same basis.....lb. .05½- .06½
Orthodichlorobenzene prices west of Rockies, 1c. per lb. higher.
Orthonitroanilin, dms.....lb. .45 - —
Orthonitrochlorobenzene, dms..lb. .15 - .16
Orthonitroparachlorophenol,cns.lb. .75 - —
Orthonitrotoluene, dms.....lb. .09 - —
Orthophenetidin, dms.....lb. .82 - —
Orthotoluidin, dms.....lb. .19 - —
Osage orange, crystals, bgs... lb. .23 - —
extract, bbls., No. 1.....lb. .11 - —
No. 2.....lb. .10 - —
Oxyquinolin sulphate, cns., 100 lbs., works..lb. 3.50 - —
bots., cns., 1-50 lbs.....lb. 3.75 - 4.15

P

Papain, powd., cs.....lb. 4.00 - 4.25
Paprika,[1] Portuguese, extra fancy, bgs..lb. .39 - .40
good, bgs.....lb. .38 - .39
Spanish, extra fancy, cs.....lb. .46½- .47
medium, cs.....lb. .45 - .46
Parachlorophenol, dms.....lb. .32 - —
Paracymene, refd., dms.....gal. .75 - 1.25
Paradichlorobenzene, dms., c.l.lb. .11 - .13
l.c.l.....lb. 12½- .15
Paraffin,[2] crude scale and semi-refined, 122-124 A.M.P., slack bbls. or solid in 100-kilo bgs., 10,000 lbs., f.o.b. refinery.lb. .04¼- —
124-126 A.M.P., same basis.lb. .04¼- —
126-128 A.M.P., same basis.lb. .04½- —
128130 A.M.P., same basis.lb. .04¾- —
130-132 A.M.P., same basis.lb. .05 - —
132-134 A.M.P., same basis.lb. .05¼- —
134-136 A.M.P., same basis.lb. .05½- —
fully refined, 120-122 A.M.P., bbls., slabs, loose, same basis..lb. .05 - —
123-125 A.M.P., slabs, loose, same basis..lb. .0520- —
120-122 A.M.P., slabs, loose, same basis..lb. .0520- —
128-130 A.M.P., slabs, loose, same basis..lb. .0560- —
130-132 A.M.P., slabs, loose, same basis..lb. .0585- —
131-133 A.M.P., slabs, loose, same basis..lb. .0585- —
133-135 A.M.P., slabs, loose, same basis..lb. .0615- —
Paraffin, fully refd.—
135-137 A.M.P., slabs, loose, same basis..lb. .0640- —
138-140 A.M.P., slabs, loose, same basis..lb. .0715- —
141-143 A.M.P., slabs, loose, same basis..lb. .0765- —
143-145 A.M.P., slabs, loose, same basis..lb. .0810- —
145-150, slabs, cartons, same basis..lb. .0860- —
146-148 A.M.P., slabs, loose, same basis..lb. .0930- —
149-151 A.M.P., slabs, loose, same basis..lb. .10½- —
160-165 A.M.P., f.o.b. refinery, San Francisco, c.l.....lb. .14 - —

Paraffin wax, crude and semi-refined, packed in 50-kilo bgs., is 10 points per lb. higher; prices on slabbed material are 20 points per lb. higher than on solid. Tankcar prices are 30 points less than barrel prices. Fully refined wax in bags is 40 points higher than slabs loose; fully refined wax in tankcars is 5 points lower than slabs loose prices.

Paraformaldehyde,[4,5] dms., 1,000 lbs. or more, shipments, f.o.b. Perth Amboy, Philadelphia, or N.Y.C..lb. .23 - —
100 to 900 lbs., shipments, same basis..lb. .24 - —
Paranitrophenol, kgs.....lb. .35 - —
Paraldehyde, tech., 98%, 5b and 110-gal. dms., l.c.l., works.lb. .12 - —
5 and 10-gal. dms., works..lb. .15 -
USP, cns., cbys.....lb. .37 - .45
Paranisidine, ams.....lb. .75 - —
Paranitroanilin, kgs., works...lb. .45 - —
Paranitrochlorobenzene, kgs...lb. .15 - —
Paranitrotoluene, kgs.....lb. .30 - —
Paraphenylenediamine, bbls....lb. 1.25 - 1.30
Paratoluenesulphonamide, bbls.lb. .70 - —
Paratoluidin, bbls.....lb. .48 - —
Pareira brava root, bls.....lb. .21 - .22
Paris green, dealer, dms., kegs, c.l., f.o.b. wks., frt. alld..lb. .24 - .26
l.c.l., same basis.....lb. .25 - .27
Passion flower, herb, bls.....lb. .07 - .08
Patchouli leaves, bls.....lb. .35 - .40
Peanut meal, 6.75%, Southern Alabama-Georgia points, November delivery..ton.36.00 - —
Pectin, 200-lb. bbls. .....lb. .80 - —
Peltitory root, bls.....lb. .65 - .70
Pennyroyal leaves, bls.....lb. .15 - .16
Pentachlorophenol, dms., works., lb. .20 - .25
Pentaerythritol, C.P., bbls., dlvd., lb. .75 - —
less than barrel lots.....lb. 1.00 - —
tech., bbls., dlvd.....lb. .33½- .35½
less than barrel lots.....lb. .40 - —
Tetra acetate, bbls., dlvd....lb. 1.00 - —
less than barrel lots.....lb. 1.50 - —
Pentanes,[1] 28°38° C., industrial grade, dms., c.l., G.3, gal. .11 - —
l.c.l., G.3.....gal. .19 - —
tanks, G.3 .....gal. .06½- —
laboratory grade, dms., c.l., G.3...gal. .16 - —
l.c.l., G.3.....gal. .29 - —
10 gal., G.3.....gal. .55 - —
Pepper, black,[1] 15 tons, bgs...lb. .0650- .0655
50 to 100 bgs.....lb. .0680- .0690
White,[1] 15 tons, bgs.....lb. .11½ Nom.
24 bgs. .....lb. .1295- .1305
Red, chillies, dom., fair, Hontaka type, bgs..lb. .38 - .39
Carolina, bgs.....lb. .18½- .19
Japan, Hontaka.....lb. .36 - .37
Mombassa, bgs. .....lb. .23 - .24
Sierra Leone, bgs.....lb. .22½- .23
Peppermint leaves, dom., bls..lb. .40 - .45
import, bls. .....lb. .96 - 1.10
Perchlorethylene,[3] dms., c.l., works, frt. alld., zone 1, lb. .08 - —
l.c.l., same basis.....lb. .08½- —
Zone 2, dms., c.l., works, frt. alld..lb. .08½- —
l.c.l., same basis.....lb. .09 - —
Zone 3, dms., c.l., works, frt. alld..lb. .09 - —
l.c.l., same basis.....lb. .09½- —
Zone 4, dms., c.l., f.o.b. stock point .lb. .09 - —
l.c.l., same basis.....lb. .09½- —

All prices on perchloroethylene are frt. alld. with the exception of Zone 4, in which case the prices indicated are based on f.o.b. L. A., Cal.; S. F., Cal.; Portland, Ore., and Seattle, Wash. Zone 1 includes the following states:—Conn., Md., N. Y., Va., Ky., Me., N. J., Vt., W. Va., Mo., N. H., Tenn., Ind., Ia., Pa., R. I., Ill., Mich., Minn., Wis., Del., Mass., N. C., O., Omaha, Neb.; Kansas City, Kansas. Zone 2 includes Ala., Kan., except Kansas City; N. D., Ga., Neb., except Omaha; S. D., Miss., Ark., S. C., La., Okla., and Fla. Zone 3 includes Colo., N. M., Wyo., Texas and Eastern Montana. Zone 4 includes Arizona, Western Montana, Idaho, Ore., Nev., Wash., Utah and Cal.

Peru, balsam, dms.....lb. 1.25 - 1.30
Petrolatum, USP, amber, c.l...lb. .03¾- —
l.c.l. .....lb. .04¾- —
extra, c.l. .....lb. .03¾- —
l.c.l. .....lb. .04¾- —
white, cream, c.l.....lb. .04¾- —
l.c.l. .....lb. .05¾- —
lily, c.l. .....lb. .05¾- —
l.c.l. .....lb. .07 - —
snow, c.l. .....lb. .06¾- —
l.c.l. .....lb. .07¾- —
soft, c.l. .....lb. .05½- —
l.c.l. .....lb. .06½- —
Yellow, soft, c.l.....lb. .03¾- —
l.c.l. .....lb. .04¾- —

Petrolatum prices are f.o.b. N. Y. for material packed in drums, charged for extra and returnable for credit.

Petroleum, crude, bulk, at wells, Arkansas, Smackover, heavy .....bbl. .83 - —
California, gravity 18-18.9 and below..bbl. .80 - —
30-30.9 and above....bbl. 1.23 - —
Illinois basin.....bbl. 1.37 - —
Louisiana .....bbl. .80 - 1.48
Oklahoma-Kansas, gravity 20-20.9 and below..bbl. .75 - —
40 and above.....bbl. 1.25 - —
Pennsylvania, Bradford-Allegany..bbl. 3.00 - —
Buckeye lines.....bbl. 2.55 - —
Corning .....bbl. 1.31 - —
Eureka lines.....bbl. 2.59 - —
N.Y. Transit lines...bbl. 3.00 - —
Pennsylvania, National Transit lines..bbl. 3.00 - —
S.W. Penn. lines....bbl. 2.65 - —
Texas, Conroe.....bbl. 1.43 - —
East .....bbl. 1.25 - —
Gulf Coast, gravity 19-19.9 and below..bbl. 1.36 - —
40 and above.....bbl. 1.48 - —
Pecos County.....bbl. .95 - —
West (and Lea County, N. M.), gravity 19-19.9 and below..bbl. .70 - —
40 and above.....bbl. 1.12 - —
Wyoming, Lance Creek.bbl. 1.12 - —
Ether, laboratory grade, 30-60°C., c.l..lb. .18 - —
l.c.l. .....gal. .29 - —
10 gals.....gal. .55 - —
35-60°C., l.c.l.....gal. .29 - —
10 gals.....gal. .55 - —
40-75°C., c.l.....gal. .16 - —
l.c.l. .....gal. .29 - —
10 gals.....gal. .55 - —

Petroleum ether prices are spot quotations f.o.b. Group 3, for material packed in drums.

Lacquer diluent, at refinery:—
California, 100 l.b.n., 200 e.p., tanks, dlvd. Los Angeles, gal. .11 - —
Fort Welles, Wash.....gal. .12 - —
San Francisco.....gal. .11½- —
Wilbridge, Ore.....gal. .12 - —
East Coast, N. Y., tanks, gal. .11 - —
N. J., tanks.....gal. .11½- —
Group 3, benzol type, tankcars..gal. .07⅞- —
toluol type, tanks.....gal. .07⅝- .07⅛
Mineral spirits, at refinery, California (f.o.b. San Francisco), 163-252 b.r., tanks, gal. .10½- —
195-290 b.r., tanks...gal. .10½- —
246-397 b.r., tanks...gal. .10½- —
312-408 b.r., tanks...gal. .09 - —
362-458 b.r., tanks...gal. .09 - —
East Coast, N. Y., tanks, gal. .10 - —
N. J., tanks.....gal. .10 - —
Group 3, tanks.....gal. .06½- —
Gulf Coast, tanks.....gal. .06½- —

FIFTH COLUMNISTS
that have been overlooked

VERMIN and bacteria have always been the great destroyers of food stuffs and perishable materials of armies operating in the tropics. The slightest crack or invisible opening in ordinary packaging is a broad avenue of attack for these microscopic fifth columnists. But now our fighting men not only are armed with steel, but maintain full physical strength on supplies kept fresh and pure in steel containers. These sealed, air tight drums and pails cannot be penetrated by tropical bacteria or any other exterior contaminating contact.

STERI SEALD LINED STEEL CONTAINERS

provide safe packaging for sensitive materials and foods. Years of research and tests in our laboratory have enabled us to meet many exacting requirements in packaging perishable products for shipment all over the world.

The severe test that war conditions have imposed on Steel Containers in world wide shipments is eloquent endorsement of these containers as guardians of product purity for use under less strenuous conditions.

WILSON & BENNETT MANUFACTURING CO.
6532 SOUTH MENARD AVENUE, CHICAGO, ILLINOIS
Subsidiary of Inland Steel Company
Plants at Chicago, Jersey City, New Orleans and Richmond, Cal. ● Sales offices in principal cities
Makers of Steel Drums and Pails

Petroleum, mineral spirits, Baltimore, 25-100 gals..gal. .13 - —
100 gals. or more.....gal. .12 - —
Boston .....gal. .12 - —
Bridgeport, Conn.....gal. .1630- —
Buffalo .....gal. .1240- —
Camden, N. J.....gal. .11 - —
Chicago .....gal. .13½- —
Detroit .....gal. .1580- —
Hartford .....gal. .1630- —
Kansas City, Mo.....gal. .1480- —
Lancaster, Pa.....gal. .12 - —
Milwaukee .....gal. .1440- —
Minneapolis .....gal. .1420- —
Newark (200 gal.).....gal. .11 - —
New York (200 gal.)....gal. .11 - —
Philadelphia .....gal. .11 - —
Pittsburgh .....gal. .129 - —
Providence .....gal. .13 - —
Rochester .....gal. .1320- —
St. Louis.....gal. .1370- —
Syracuse .....gal. .14 - —
Washington, D. C.....gal. .13 - —
Wilmington, Del.....gal. .13 - —
Naphtha, cleaners, at refinery:—
California (f.o.b. San Francisco), tanks..gal. .12 - —
East Coast, N. Y., tankcars..gal. .11 - —
N. J., tankcars.....gal. .11 - —
Group 3, tankcars.....gal. .07½- —
Gulf Coast (f.o.b. New Orlans), tankcars..gal. .06¾- —
tankwagon, Boston.....gal. .13 - —
Bridgeport .....gal. .1730- —
Chicago .....gal. .1380- —
Detroit .....gal. .15 - —
Milwaukee .....gal. .1440- —
Minneapolis .....gal. .1420- —
Newark .....gal. .12 - —
New York.....gal. .12 - —
Philadelphia .....gal. .125 - —
St. Louis.....gal. .1470- —
high-solvency, aromatic, No. 1, over 70% arom., tanks, f.o.b. Bayway..gal. .21½- —
No. 2, over 90% arom., same basis..gal. .21½- —
3, same basis.....gal. .22½ —
8, tanks, f.o.b. Wilmington, Cal..gal. .14 - —
No. 30, same basis...gal. .13½- —
40, same basis.....gal. .13½- —
8, 30 and 40, in drums, delivered in metropolitan area, New York, gal., .29, .28 and .28, respectively.
V.M.&P., at refinery:—
California, 46.5, 254 f.b.p., 380 e.p., tanks, f.o.b. El Segundo..gal. .11 - —
Richmond .....gal. .11½- —
Willibridge, Ore., Pt. Wells, Wash..gal. .12 - —
54-77, 190 f.b.p., 310 e.p., tanks, dlvd. Los Angeles .....gal. .10 - —
dlvd. Los Angeles....gal. .10 - —
San Francisco....gal. .10½- —
Portland, Seattle..gal. .11 - —
East Coast, N. Y., tanks..gal. .11 - —
N. J., tanks.....gal. .11 - —
Group 3, tanks.....gal. .07½- —
Gulf Coast (dlvd. New Orleans), tanks..gal. .06½- —
tankwagon, Boston.....gal. .13 - —
Chicago .....gal. .1380- —
Detroit .....gal. .15 - —
Milwaukee .....gal. .1540- —
Minneapolis .....gal. .1520- —
Newark (200 gal.).....gal. .125 - —
New York.....gal. .12 - —
Philadelphia .....gal. .125 - —
Pittsburgh .....gal. .12½- —
St. Louis.....gal. .1470- —
Solvent, rubber, at refinery, California (f.o.b. San Francisco)..gal. .24 - —
East Coast, N. Y., tanks..gal. .11 - —
N. J., tanks.....gal. .11 - —
Group 3, tanks.....gal. .07½- —
Stoddard (CS 8-33), at refinery:—
California (f.o.b. San Francisco), tanks..gal. .11 - —
East Coast, N. Y., tanks..gal. .09½- —
N. J., tanks.....gal. .09½- —
Group 3, tanks.....gal. .06¾- —
tankwagon, Baltimore...gal. .13 - —
Boston .....gal. .12 - —
Chicago .....gal. .13½- —
Detroit .....gal. .1580- —
Milwaukee .....gal. .1440- —
Minneapolis.....gal. .1420- —
Newark .....gal. .11 - —
New York.....gal. .11 - —
Philadelphia .....gal. .11 - —
Pittsburgh .....gal. .12½- —
St. Louis.....gal. .1370- —
Syracuse .....gal. .14 - —
Phenobarbital, 5-lb. tins.....lb. 3.60 - 3.70
dms., 100 lbs., spot or contract, lb. 3.50 - —
Phenol,[6] USP, dms., c.l., works, frt. equald..lb. .12½- —
l.c.l., same basis.....lb. .13¼- —
under 1,000 lbs.....lb. .14¼- —
tanks, works.....lb. .11½- —
Phenolphthalein, USP, bbls.,dms., 2,000-lb. lots..lb. .85 - —
bbls., dms., kgs., 100-250 lbs., lb. .87 - .85
yellow, fib, dms., 2,000-lb. lots, lb. .80 - —
100-lb. fib. dms.....lb. .82 - —
25-lb. dms.....lb. .87 - —
50-lb. kgs.....lb. .84 - —
Phenothiazin, Unmodified, fib. dms., incl., 2,000-lb. shipt., 150 lbs., same terms.....lb. .65 - —
100 lbs., same terms.....lb. .67 - —
50-lbs., same terms.....lb. .70 - —
Phenyl chloride, dms.....lb. .17 - —
Phenylacetaldehyde, bots.....lb. 4.50 - 5.00
dimethylacetate, cns.....lb. 14.50 -15.
Phenylethyl acetate, cns.....lb. 5.00 - 5.25
Phenylethylphenyl acetate, bots., lb. 8.00 -15.00
Phenylhydrazin, base, CP, bots., lb. 4.55 - —
Hydrochloride, CP, bots., works, lb. 7.10 - —
commercial, kgs., works...lb. 1.75 - —
Phloroglucinol, CP, tins, wks..lb. 20.00 -22.00
tech., tins, works.....lb. 15.00 -16.00
Phosgene, ton lots, works....lb. .19 - —
Phosphate rock, Fla., land pebble, unground, run-of-mine, washed, dried (B.P.L. on a dry basis, not in excess of 4% combined oxide of iron and alumina and not more than 3% moisture) 68%-66% (7½c. per unit rise to 70% maximum and 15c. per unit fall to 66% minimum), bulk, f.o.b. cars, mines, c.l.. 68%...long ton. 2.00 - —
70%-68%, same basis (10c per unit rise to 72% maximum and 20c per unit fall to 68% minimum) 70%..... long ton. 2.40 - —
72%-74%, same basis (15c per unit rise to 74% maximum and 30c per unit fall to 70% minimum) 72%..... long ton. 3.00 - —
Phosphate rock, Fla., land pebble, 75%-74%, same basis (20c per unit rise to 76% maximum and 40c per unit fall to 74% minimum) 75%, long ton. 4.00 - —
77%-76%, same basis (25c per unit rise to 81% maximum and 50c per unit fall to 76% minimum) 77%..... long ton. 5.00 - —
finely ground (P_2O_5 on dry basis, minimum grade guaranteed and not more than 3% moisture) ground 85% minus 200 mesh, 65.5% basis 30% P_2O_5 minimum, f.o.b. cars, mines, c.l.... short ton. 2.75 - —
68%, basis 31% P_2O_5 minimum..short ton. 3.00 - —
70%, basis 32% P_2O_5 minimum..short ton. 3.25 - —
Phosphate rock, Tenn., brown phosphate rock, unground, run-of-mine, washed, dried (B.P.L. on a dry basis, combined oxide of iron and alumina adjusted on basis of 2 units B.P.L. for 1 unit I. & A. and not more than 3% moisture) 68%-66% B.P.L. 6% I. & A. (12½c. per unit rise to 70% maximum and 15c. per unit fall to 66% minimum; I. & A. basis 6% with 2 units of B.P.L. for 1 unit I. & A., added when below and deducted when above) 68%, f.o.b. cars, mines, c.l.... long ton. 4.30 - —
Phosphate rock, Tenn. brown prosphate rock, 70%-68% B.P.L., 5% I. & A. (15c per unit rise to 72% maximum and 20c per unit fall to 68% minimum; I. & A. basis 5½% with 2 units B.P.L. for 1 unit I. & A., added when below or deducted when above), same basis, 70% B.P.L..long ton. 4.80 - —
72%-70% B.P.L., 5½% I. & A. (20c. per unit rise to 75% maximum and 25c. per unit fall to 70% minimum; I. & A. basis 5½% with 2 units B.P.L. for 1 unit I. & A., added when below or deducted when above) 72% B.P.L. .....long ton. 5.30 - —
finely ground rock (P_2O_5 on a dry basis, minimum grade guaranteed and not more than 3% moisture, no adjustment for excess grade or I. & A., ground 95% minus 200 mesh or 85% minus 300 mesh) 29% P_2O_5, f.o.b. cars, mines, c.l..... short ton. 4.50 - —
30% P_2O_5, same basis..... short ton. 4.70 - —
31% P_2O_5, same basis..... short ton. 4.80 - —
32% P_2O_5, same basis..... short ton. 5.00 - —
33% P_2O_5, same basis..... short ton. 5.50 - —
Phosphorus, red, cs.....lb. .40 - .44
amorphous, tns.....lb. .55 - —
yellow,[5] dms.....lb. .18 - .20
cases .....lb. .23 - .25
Phosphorus, oxychloride,[3] cyls.lb. .15 - .18
pentoxide, dms., c.l., works..lb. .11 - .12
l.c.l., dms., works.....lb. .13 - .14
Sesquisulphide, cs.....lb. .38 - .42
Trichloride, cyls.....lb. .15 - .16
Phthalamide, bbls., wks., ton..lb. .35 - —
single, bbls., works.....lb. .40 - —
kgs., works.....lb. .45 - .50
Phthalic anhydride,[4] bbls., c.l., works, frt. alld. E. of Miss. R—lb. .14½- —
l.c.l., same basis.....lb. .15½- —
Pichi leaves, bgs.....lb. .08 - .09½
Picrotoxin, bots.....oz. 8.00 - —
Pilocarpine hydrochloride, bots., vis..oz. 3.90 - 5.25
Nitrate, bots., vis.....oz. 3.80 - 5.15
Pimento,[1] Jamaica, bgs.....lb. .27 - .28
Mexican (see Allspice, Mexican).
Pinkroot, bls.....lb. .63 - .80
Pitch, burgundy (see B).
Coaltar, 160° m.p., bbls., c.l., works..ton. 19.00 - —
l.c.l. .....ton. 22.00 - —
Hardwood, 1-time, dms., c.l., dlvd., Akron..ton. 23.75 -24.00
Linseed, dms.....lb. .05 - .05½
Petroleum (see Asphaltum, Mexican, Texas).
Pitch, pine, dms.....100 lbs. 3.25 - —
stands, 200 lbs.....stand. 6.00 - —
Plaster of paris (see Gypsum).
Pleurisy root, Southern, bls...lb. .12 - .13
Podophyllin, dms., dlvd. E. of Miss..lb. 8.75 - 9.60
Poke root, bls.....lb. .10 - .11

SHELL

IT'S no news to you that conditions in the paint business have changed . . . and will be changing a lot more before we return to normal. What may be news is that we might have just the new and different petroleum naphthas you are looking for.

Our complete, modernly equipped and conveniently located plants turn out not only a full line of regular naphthas, but special ones, too, as the need arises.

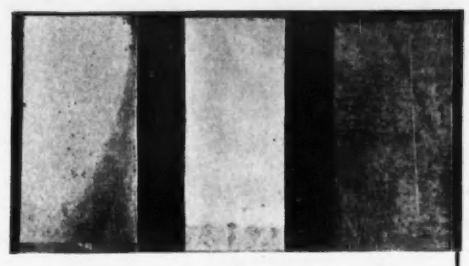
Now is a good time to remember: "For your naphtha needs, see Shell!"

INSIDE NEWS

NOVEMBER PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1942

New Protective Coatings Withstand Rigorous Tests

Variety of Materials That May Be Coated Make Them of Value to Many Industries



1 2 3

Results of the tests: The copper panel (3) is perfect, showing no breakdown at any point. The aluminum panel (2) shows pitting at edges and slightly spotted at upper left. The brass panel (1) shows very small pitting over central area.

A number of different types of coatings have been developed recently which afford permanent finishing and protection of metals, woods, lithic surfaces, fabrics, leathers and other materials. The photograph illustrates a test made on panels of brass, aluminum and copper for weatherability after the panels had been coated with one of these new protective coatings. The one selected for the panel tests is a water-clear coating which possesses many qualities of value to almost every branch of industry. The coating is resistant to both fresh water and salt water. In a salt spray test, in a 25 per cent solution over a period of 256 hours, the coating showed no effect. In the ultra-violet ray test, the results of which are shown in the photograph, no ill effects were revealed over a period of 300 hours with temperature at 125 deg. F., with water dip at 45 deg. every 15 minutes, followed by 100 hours in salt spray.

The coating was also found through testing in an industrial laboratory to be resistant to all mineral acids in any concentration at normal temperatures; to be resistant to alkaline solution and to all alcohols. Other tests revealed further that the coating had immunity to all petroleum products—oils, greases, gasoline—and resistance to animal or vegetable fats. Panels covered with the coating were given weather tests and temperatures from 150 deg. F. to —45 deg. F. had no unfavorable reaction on the panels. Under dry conditions, the coating will function at temperatures up to 500 deg. F.

The coating is impermeable even in thin coats. When the above tests were conducted, all of them were made with material which had been given only one dipped coat .0002 thick.

Another highly technical coating is produced from a basic material available in only one small deposit. It is refined to a consistency that enters into solution with solvents and other ingredients to serve as a unique protective coating. It is resistant to acids and alkalies in all concentrations at all normal working temperatures. Equally important, the coating offers protection to the surfaces of metals and lithic and wood surfaces against moisture and all corrosive reagents. Or it may be used to protect linings for tanks to carry water, hot or cold (but not drinking water), acid rinse and storage tanks, tank cars, pipe fittings, fume ducts, exposed metals, concrete and all other materials and installations that are subjected to deterioration by the elements. The coating may also be used as a substitute for galvanizing. It may be applied by brushing or spraying or, if the object is small, by dipping. Two coats are recommended for exposed surfaces, but as many as 6 to 10 coats may be needed for storage tank linings to avoid porosity under hydrostatic pressure. (221)

Tests made for the coating's resistance to acids and alkalies produced the following results:

Nitric acid	50 percent	72 hours	160 deg. F. No Effect
Sulphuric Acid	50 percent	72 hours	160 deg. F. No Effect
Hydrochloric acid	50 percent	72 hours	160 deg. F. No Effect
Hydroflouric acid	50 percent	72 hours	160 deg. F. No Effect
Hydroflouric & Nitric Acid	30 percent	72 hours	160 deg. F. No Effect
Caustic, saturated Sol.		6 days	190 deg. F. No Effect
Water		2 days	212 deg. F. Improved
Nitric Acid	30 percent	28 days	190 deg. F. Failed

These tests suggest a wide range of practical uses for the coating. This is of particular interest today when American industry has been so largely converted to war work.

Commercial Importance of Protein Material

Protein materials — jellylike substances which are the essential part of all living cells —are finding favor commercially because of their relative abundance and great versatility. Many striking and unconventional combinations of protein materials have been brought to light. Picture, for instance, a synthetic textile fiber made by extrusion of a mixture of cellulose xanthate (made from purified spruce woodpulp) and casein derived from skim-milk. A plastic compound, used as an electric insulator is made from a pine resin and corn protein. Casein, made from skim-milk by precipitation with an excess of very dilute acids, is also used in Portland cement to prolong the setting time. All of these new uses, and many more, indicate that protein materials will find increasing duties in industry as time goes on. (222)

Canned "Ham 'n Eggs"

There's nothing new about cooking ham with eggs, but when these two products are combined in a tin can, it's news. Canned ham and eggs are another wartime development, the idea being to supply the armed forces with a canned egg product that is high in protein. Canned ham and eggs will give the soldiers a needed and most welcome variation in their diet. The formula for the product, technically known as chopped ham and eggs, was developed by a large food packer in cooperation with representatives of the Quartermaster Corps. (223)

* * * * *

Despite a rumor to the contrary, recent studies indicate that the lipase content of cow's milk exceeds that of goat's milk. The possible development of a "goaty" flavor may be due to the large amount of caprylic acid in goat's milk fat as compared with the relatively slight quantity in the fat of cow's milk.

Polyamyl naphthalene, l.c.l., dms., works..lb. .25 - —
Pomegranate bark, bgs.....lb. 1.05 - 1.10
Root bark, bgs.....lb. .80 - .85
Poppy flowers, red, bls.....lb. .65 - .85
Seed,[1] Dutch, bgs.....lb. .65 - .67
Indian, white, bgs.....lb. .09¾- .10¼
Turkish, bgs. .....lb. .36 - .37
Potash abietate.....lb. .08 - —
Acetate, USP, bbls., 250 lbs..lb. .28 - —
cns., 25 lbs.....lb. .31 - .34
Arsenite,[6] USP, solut., 100-lb. lots, cbys., demjs..lb. .13 - .15
Bicarbonate, USP, cryst., bbls., kgs, 300 lbs..lb. .19 - .21
gran., bbls., kgs., 250 lbs.lb. .19 - .21
Bichromate,[2,5] spots, c.l., works, lb. .09¾- —
6 casks or 10 bbls., or over, works..lb. .09¾- —
5 casks or 9 bbls., or less, works..lb. .10 - —
Bromide, USP, gran., bbls., 500 lbs..lb. .27 - .31
kgs., 100 lbs.....lb. .23 - .32
Carbonate, calc., doms., c.l., works..lb. .06½- —
l.c.l., same basis.....lb .06¾- —
hydrated, 82-85%, bbls., c.l., works..lb. .05½- —
l.c.l., same basis.....lb. .05¾- —
liquid, dms., c.l., works, frt. alld..lb. .03 - —
l.c.l., dms., same basis.lb. .03½- —
tanks, same basis.....lb. .02¾- —

Potash, carbonate, USP, gran., bbls., 325 lbs..lb. .14 - .16
powd., bbls., 325 lbs.....lb. .19 - —
kgs., 100 lbs.....lb. .21 - —
Caustic, flake, 88-92%, dom., c.l., works..lb. .07 - —
l.c.l., works.....lb. .07½- —
liquid, 45% basis, dms.....lb. .03¾- .03½
tanks .....lb. .02¾- —
solid, 88-92%, dom., dms., c.l., works..lb. .06¾- —
l.c.l. .....lb. .06½- .06¾
Chlorate,[2,6] cryst., kgs., works lb. .11 Nom.
powd., kgs., works.....lb. .09¾- .10
Chloride, tech., 98%, cryst., bgs., kgs..lb. .03 Nom.
Chromate,[2,5] bgs..... lb. .24 - .27
Citrate, USP, gran., 250-lb. bbls., lbs...lb. .33½- —
100-lb. dms.....lb. .34½- —
25-lb. dms. .....lb. .35½- —
25-lb. dms. .....lb. .37½- —
powd., 3c. per lb. higher.
Cyanide, dom., dms., works..lb. .55 - —
gold, 41% gold, bots., works oz. 14.20 - 14.95
Fluoride, bbls. .....lb. .34 - .40
Glycerophosphate, 75% sol., dms., 1,000-lb. lots..lb. 1.50 - 1.52
100-lb. lots .....lb. 1.60 - 1.62
50-lb. lots, cbys. or cns..lb. 1.65 - 1.67
25-lb. lots, cns.....lb. 1.75 - 1.77

Potash, guaiacolsulphonate, NF, fib. dms., 100-lb. lots..lb. 1.75 - —
25 lbs. to 50 lbs.....lb. 1.80 - 1.85
Hydroxide, USP, sticks, dms., 100 lbs. to 1,000 lbs..lb. .34 - .36
Hypophosphite, cns., 100 lbs..lb. .72 - —
25 to 50 lbs.....lb. .75 - —
Iodate, bots., 5 lbs.....lb. 3.46 - —
cns., 25 lbs.....lb. 3.35 - —
Iodide, bots., or cans.....lb. 1.44 - 1.48
dms. .....lb. 1.35 - 1.38
Kainit, 20%, K_2O, bulk, ex vessel, Atlantic or Gulf ports, ton. No prices
Manure salt, dom., 22%, K_2O, f.o.b. Carlsbad, N. M., unit-ton. .20 - —
25% K_2O, same basis..unit-ton. .21 - —
import, 30%, K_2O, bulk, ex vessel, Atlantic or Gulf ports..ton. No prices
Metabisulphite, kgs. .....lb. .18 - .19
CP, cryst., 300-lb. bbls....lb. .34 - —
purified, 300-lb. bbls.....lb. .28 - —
Muriate, dom., 60-62-65% K_2O, bulk, ex vessel, ports, unit-ton. .53½- —
granular, 50-52% K_2O.unit-ton. .56 - —
Domestic muriate of potash prices, basis f.o.b. Carlsbad, N. M., are 11.2c. per unit of K_2O less than the ex vessel price; basis Trona, Cal., 8c. per unit of K_2O less than ex vessel price at Pacific Coast ports.

Potash, oxalate, pure, cryst., kgs. lb. .40 - .42
tech., bbls., dms.....lb. .28 - .30
Nitrate, crude, bgs., c.l.f. ports, ton. No prices
Perchlorate,[2,6] kgs., works..lb. .09½- .11
Permanganate, tech., dms., works..lb. .19¾- .20¼
USP, dms., works.....lb. .20¼- .21
Prussiate, red, bbls., dms....lb. .70 - .75
Yellow, spot, bbls.....lb. .17 - .19
Ricinoleate, tech., bbls.....lb. .18 - -
Silicate alkaline, lumps, bgs., works..lb. .07 - —
glass, bgs., c.l.....ton.290.00 - —
l.c.l. .....100 lbs.15.25 - —
solution, 29° Be, ret. dms., c.l., works..100 lbs. 4.25 - —
l.c.l., 5 or more, works, 100 lbs. 5.00 - —
1-4, works.....100 lbs. 5.50 - —
32° Be, ret. dms., c.l., works 100 lbs. 4.75 - —
l.c.l., 5 or more, works, 100 lbs. 5.50 - —
1-4, works.. ...100 lbs. 6.00 - —
40.5° Be, ret. dms., c.l., works..100 lbs. 5.75 - —
l.c.l., 5 or more, works, 100 lbs. 6.50 - —
1-4, works.....100 lbs. 7.00 - —

BY NATIONAL CAN

NOVEMBER PREPARED BY NATIONAL CAN CORPORATION, NEW YORK, N. Y. 1942

An Oil That's Different

One more vegetable oil added to the galaxy of oils now in commercial use is not news—except when that oil is different. Jojoba is different. It has remarkable stability under heat, freedom from color and odor, and a limpid character. Right now, jojoba oil—still in the test-tube stage—appears to be earmarked for special duty in the oil world by virtue of its unique properties.

This oil may some day be employed commercially in the chemical processing, soap, leather and lubricating oil industry, as well as in the fields of wax polishes and cosmetics. In the electrical industry there may be opportunity for its use as a transfer oil. Since oils are used for a great variety of purposes in modern industrial life, there is a broad field open for possible applications of jojoba oil. (224)

British Speed Up Bomb Painting

Three persons can put the paint on 5,000 shells in 8 hours with a new machine designed and built in 10 days by British makers of paint-spraying equipment. This machine does the work of 120 people in one-fiftieth of the time and can give a 25-pounder shell its coat of protective paint in 4.8 seconds—a process which formely required four or five handlings and as many minutes. Two watchers and a loader can do the work. Other paint-spraying machines designed to speed up production have also been made.

Technicians were able to undertake the job because of their experience in making machinery for lacquering food cans, many of which have been supplied to canners since the war. These machines coat 1-pound cans at the rate of 25,000 per 8-hour shift. Some of Britain's "beautiful bombs" are handled at these factories, where tiny jet sprays, scaled to a half-thousandth of an inch, form an inside coating to protect the metal from the action of explosive chemicals. (225)

Canning Industry Booms in South Africa

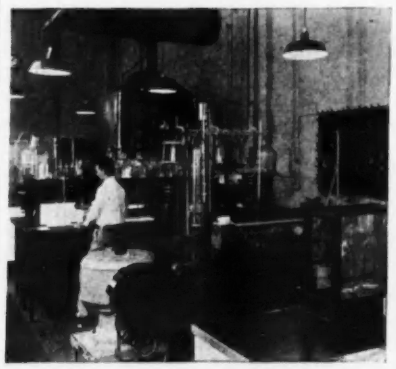
As a result of wartime needs, the canning industry in South Africa has expanded greatly. The canners in the Union of South Africa are now canning 30,000,000 lb. of jam, marmalade and jellies annually. Moreover, huge quantities of canned vegetables have been packed for the army in Egypt. The South African canners are also turning out canned pork and beans, beans and tomatoes, sausages, pork and beef, fish, sardines and sweet corn. They are even putting dried fruit into cans. (226)

Bamboo Universal Raw Material

Bamboo can supply all human needs, according to the United States Soil Conservation Service. There is no human need which cannot be supplied by some form of bamboo product: food, weapons, shelter, clothes, furniture, containers, bridges, conduction pipes, paper, cables, and so on "ad infinitum". The Forest Research Institute of Dehra Dun in India believes that the final solution of the world's recurring shortage of raw material for paper will only be found in the forest and waste lands of the tropical and sub-tropical belts, with bamboo the most important product. The famous "Bamboo Books", containing more than 100,000 seal characters, comprising 15 different works dealing with the history of China for 2,200 years, were written on tablets made of bamboo. Bamboo would give paper a durability and strength beyond anything yet known or developed. (227)

"Research Is Organized Thinking"

National Can Corporation's Laboratories Continue To Push Chemical Research



A View in the Chemical Laboratories

In this well equipped room problems involving chemical research are under way. They include studies on lacquers, the resistance of substitute plates, fluxes and other production problems of vital interest to the canning industry.

Technical Topics

ALCOHOL from waste citrus fruits, at a lower cost than alcohol from molasses, has been made possible by a new process announced recently at Winter Haven, Fla. 61,000,000 gallons of waste juices are available for this process in Florida canneries. (228)

CAROTENE, extracted from grass, is proposed as a coloring for margarine because of its nutritive properties, rather than synthetic dyes of no nutritive value, by an English scientist. (229)

GINSENG ROOT, called the man image, highly regarded in China for generations for curative properties, has a glucosidal principle which is hydroscopic and which has found some use as a glycerine substitute. Ginseng has been exported to China in large quantities for many years. (230)

TUNG OIL, one of the chief exports from China to this country, has been successfully used as a motor fuel in extended tests conducted by the Chinese. (231)

WAX EMULSIONS are mixed with the final rinse in Army laundries to render clothes water resistant and stain repellent. (232)

VITAMIN C—The South African guava (fruit of the Poidium tree, which also grows in South America, the West Indies and Ceylon) has a higher vitamin C content than any other known fruit in the World! So say scientists of the British Empire. (233)

FATS — Unsaturation of hydrogenated fats measurement is stated to be simplified by a direct titration method described in a recent British trade journal. In the procedure presented, the iodine value of hydrogenated fats is directly titrated in the presence of mercuric acetate with a solution of bromine in glacial acetic acid. The color of the bromine is used as the indicator. (234)

Every effort will be made to furnish additional information on these articles. Where such information is not obtainable, we will refer inquirers to the original source of the article. Write to National Can Corp., 110 E. 42nd Street, New York City. Please mention the number at end of article—also name of the magazine you saw it in.

(Advertisement)

Potash, sulphate, NF, powd., 650 lbs., bbls..lb.	.15	Nom.	
100-lb. kgs.....lb.	.17	-	—
Prices on granular 4c. higher.			
tech., dom., bulk basis, 90-95%, K_2SO_4, min. 90%, ex vessel, Atl. or Gulf ports. ton.	36.25	-	—
Sulphocyanide, C.P., dms....lb.	.75	-	.85
N.F., dms.....lb.	.55	-	.65
Xanthate, dms., c.l.....lb.	.12	-	—
Potash-magnesia, sulphate, dom., bulk, min. 40%, K_2SO_4, 18.50% MgO, ex vessel, ports, ton.	26.00	-	—
Potash-soda ferricyanide, dms. works..lb.	.40	-	.42
Potash-titanium oxalate, 350-lb. bbls..lb.	.45		—
100-lb. dms.....lb.	.50	-	—
Prickly ash bark, bls.....lb.	.11½	-	.12
Berries, bgs.....lb.	.23	-	.25
Prince's pine herb, bls.....lb.	.32	-	.33
Procaine, hydrochloride, 25-lb. cns. lb.	8.00	-	—
5-lb. cans.....lb.	8.25	-	8.50
1-lb. bots.....lb.	8.75	-	—
Propane,[1] industrial grade, tanks, f.o.b. Group 3..gal.	.03	-	.03¾
Psyllium seed (see Fleaseed).			
Pulsatilla, bls.....lb.	1.10		Nom.

Pumice, dom., grd., fine, 4F, 3F, 2F, F, O, bgs., f.o.b. Chicago, 2,000 lbs. and up. lb.	.04	-	—
600-1,999 lbs.....lb.	.04¼	-	—
100-599 lbs.....lb.	.04¾	-	—
f.o.b. New York, 2,000 lbs. and up..lb.	.03¾	-	—
500-1,999 lbs.....lb.	.03¾	-	—
100-499 lbs.....lb.	.04	-	—
coarse, O½, ½, 1, 1½, 2, 3, bgs., f.o.b. Chicago, 2,000 lbs. and up..lb.	.04¼	-	—
600-1,999 lbs.....lb.	.04½	-	—
100-599 lbs.....lb.	.05	-	—
New York, 2,000 lbs. and up..lb.	.03¾	-	—
500-1,999 lbs.....lb.	.03¾	-	—
100-499 lbs.....lb.	.04¼	-	—
imp., Italian.....lb.	No prices		
Pumice stone packed in barrels is ½c. per lb. higher than the above prices.			
Pumpkin seed, bgs.....lb.	.12	-	.18
Purple lake (see Red).			
Putty, com'l, dms.....100 lbs.	3.15	-	—
linseed oil, raw, dms....100 lbs.	5.00	-	—
refined, dms.....100 lbs.	5.50	-	—
standard, dms.....100 lbs.	4.20	-	—
Pyrethrum[6] concentrate, liq. (20 to 1), basis 2 grams pyrethrins per 100 cc., dms., dlvd. gal.	5.75	-	—
(30 to 1), 3 grams pyrethrins per 100 cc., dms., dlvd..gal.	8.53	-	—

Pyrethrum[6] flowers, coarse, grnd., (g.f.p.) 0.9% pyrethrins, frt. alld., bbls..lb.	.27	-	.28
fine powd., 0.5 pyrethrins, frt., alld., bbls..lb.	.23	-	—
fine, grd., 0.9% pyrethins, bbls..lb.	.29	-	—
1.3 pyrethrins, frt., alld., bbls..lb.	.39	-	—
Pyridin,[6] denaturing, dms....gal.	1.71	-	—
refd., 2°, dms.....lb.	.46	-	—
Pyrites, Spanish, bulk, c.i.f. Atl. ports..unit-ton.	No prices		
Pyrocatechin, CP, cryst., works, fib. dms., tins..lb.	2.15	-	2.40
resublimed, fib. dms., tins..lb.	4.60	-	—
Pyrophylite, standard, 200 mesh, c.l., mines..ton.	10.00	-	—
325 mesh, same basis.....ton.	13.00	-	—
No. 3, 200 mesh, c.l., mines.ton.	8.00	-	—
325 mesh, same basis.....ton.	11.00	-	—
Pyroxylin scrap amber, cs., works..lb.	.12	-	—
black, cs., works.....lb.	.10	-	—
china, white, ivory, cs., works. lb.	.13	-	—
dense, white, cs., works....lb.	.10	-	—
gray, cs., works.....lb.	.08	-	—
mixed, mottles, opaques, cs., works..lb.	.04	-	—
translucent pastels, cs., works. lb.	.10	-	—
transparent, cs., works.....lb.	.20	-	—
colors, cs., works.....lb.	.12	-	—

Pyroxylin, shavings, amber, cs., works..lb.	.16	-	—
colors, mixed, cs., works...lb.	.10	-	—
white, cs., works.....lb.	.15	-	—

Q

Quassia chips, dom., bls.....lb.	.06	-	.06
Quebracho extract, liquid, 35% tan. bbls., works..lb.	.05¾	-	—
tanks, works.....lb.	.05½	-	—
solid, 63%, bgs., c.l., ex dock, plus duty..lb.	.04¾	-	—
clarified, 64%, bgs., c.l., same basis..lb.	.05	-	—
pwd., bgs., c.l.....lb.	.10½	-	—
l.c.l., bgs.....lb.	.11	-	—
Queen of the meadow leaves, bgs..lb.	.12	-	.13
Root, bgs.....lb.	.10	-	.11
Quercitron, crystals, bgs.....lb.	.26	-	—
extract, bgs., No. 1.....lb.	.10	-	—
No. 2.....lb.	.09½	-	—
No. 3.....lb.	.09	-	—
solid, bxs.....lb.	.18½	-	—
Quicksilver,[1,4] dom., flasks (76 lbs. net), f.o.b., shipment point in Cal., Ore., Wash., Idaho, Utah, Nev., and Ariz—flask.	191.00	-	—

Quicksilver, dom., flasks (76 lbs. net) f.o.b., shipm't point in Tex., and Ark..flask.193.00- —
Quicksilver freight $4.28 per flask to N.Y.; dealers commission, 1%, brokers, 2%.
Quince seed, bgs.....lb. 1.50 - 1.75
Quinidine,[3] NFV, cryst., cns..oz. 1.06 + .13½*
powd., precip., cns.....oz. 1.01 + .13½
Sulphate, USP, cns.....oz. .71 + .13½

* Subject to surcharge of 13½c. per oz.; see note under Quinine.

Quinine,[3] 100 ozs., cns.....oz. .84 + 13½*
Acetate, cns.....oz. 1.05 + .13½
Arsenate, cns.....oz. 1.05 + .13½
Arsenite, cns.....oz. 1.07 + .13½
Bisulphate, cns.....oz. .60 + .13½
Citrate, cns.....oz. .78 + .13½
Dihydrobromide, bots.....oz. .86 + .13½
Dihydrochloride, bots.....oz. .86 + .13½
Ethylcarbonate, cns.....oz. 1.25 + .13½
Ferrocyanide, cns.....oz. 1.07 + .13½
Formate, cns.....oz. 1.00 + .13½
Hydrochlorosulphate, cns...oz. .81 + .13½
Glycerophosphate, cns.....oz. 1.20 + .13½
Hydrochloride, cns.....oz. .76 + .13½
Hydriodide, cns.....oz 1.08 + .13½
Hypophosphite, cns.....oz. 1.07 - .13½
Phosphate, cns.....oz. .80 + .13½
Salicylate, cns.....oz. .79 + .13½
Sulphate, USP XI, cns....oz. .67 + .13½
Sulphocarbolate, cns.....oz. 1.05 + .13½
Tannate, cns.....oz. .63 + .13½
Valerate, cns.....oz. .99 + .13½
Tartrate, cns.....oz. 1.03 + .13½

* Quinine buyers must pay a surcharge of 13½c. per oz. to cover present war risk insurance, ocean freight rates, and additional expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surcharge invoiced.

Quinine-urea hydrochloride,[3] cns., oz. .81 + .13½

Subject to surcharge of 13½c. per oz.; see note under Quinine.

R

R salt, dry, bbls.....lb. .55 - —
paste, dms.....lb. .52 - —
Rapeseed,[1] Argentine, large bgs., lb. .08¾- .09
dom., dwarf Essex, bgs...lb. .10 - .10½
Raspberries, dried, bls.....lb. .90 - 1.10
Red,[3] alizarin lake,[3] bbls., dlvd. N. of Tenn. and N. C. E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis..lb. 1.10 - 1.90

Red, alizarin lake prices are ¼c. higher dlvd. Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N.C., S.C., Tenn., Tex. (Dallas, Ft. Worth, 1½c.; El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Cadmium, lithopone, deep shade, bbls., ton lots, works, frt. alld..lb. .95 - —
400-2,000 lbs., bbls.....lb. 1.00 - —
100-300 lbs., pkgs.....lb. 1.05 - —
Red, cadmium, lithopone, light shade, bbls., ton lots....lb. .80 - —
400-2,000 lbs., bbls.....lb. .85 - —
100-300 lbs., pkgs.....lb. .90 - —
light-medium shade, bbls., ton lots..lb. .85 - —
400-2,000 lbs., bbls. .....lb. .90 - —
100-300 lbs., pkgs.....lb. .95 - —
maroon shade, bbls., ton lots. lb. 1.65 - —
400-2,000 lbs., bbls.....lb. 1.10 - —
100-300 lbs., pkgs.....lb. 1.15 - —
deep, bbls., ton lots....lb. 1.15 - —
400-2,000 lbs., bbls.....lb. 1.20 - —
100-300 lbs., pkgs.....lb. 1.25 - —
medium shade, bbls., ton lots..lb. .90 - —
400-2,000 lbs., bbls.....lb. .95 - —
100-300 lbs., pkgs.....lb. 1.00 - —

Red, cadmium, lithopone quotations are f.o.b. Balto. or whse. points, charges prepaid or allowed E. of Rockies.

Selenide, bbls., light, works. lb. 2.35 - —
maroon, works.....lb. 2.90 - —
Carmine, 40, dms., 100 lbs...lb. 4.60 - —
50 lbs.....lb. 4.75 - —
cns., 5 lbs.....lb. 5.25 - —
1 lb.....lb. 5.35 - —
Crocus martis (see Red, purple oxide).
Eosin toner, bbls.....lb. 1.35 - —
Firetoner, bbls.....lb. .85 - —
Indian, pure, bbls., f.o.b. Bethlehem, Easton, E. St. Louis, N. Y..lb. .09¼- —
90-85%, bbls., same basis...lb. .07¾- —
Imported, English, all shades. lb. .12 - —
oxide (see Red oxide)
Red, lacquer maroon, bbls., same basis..lb. 1.25 - —
Lake C toner, bbls., same basis, alizarin, lake, contracts.. lb. .90 - —
Litho toner, bbls., same basis, alizarin, lake, contracts..lb. .60 - —
Rose, lake, bbls.....lb. .25 - .28
Pink, bbls.....lb. .20 - .25
Lithol-rubine toner, bbls., same basis, alizarin lake, contracts..lb. 1.10 - —
Maroon lake, 25%, kgs., same basis, alizarin, lake, contracts..lb. .40 - —
Mercury oxide,[3] tech., bbls., 10,000 lbs..lb. 3.09 - —
smaller lots.....lb. 3.11 - —
Metallic, bbls., Pa., works..lb. .02 - —
Orange, Persian (see O).
Oxide, pure, bbls., c.l., works, lb. .09 - —
l.c.l., bbls.....lb. .09¾- —
reduced, 85% copperas oxide, bbls., l.c.l., f.o.b. Bethlehem, Easton, E. St. Louis, Copley, Ohio..lb. .08¾- —
85% copperas oxide, bbls., same basis..lb. .08¼- —
50-lb. bgs.....lb. .096 - —
Imported, English.....lb. .14½- —
Para, toner, concent., kgs., same basis, alizarin lake, contracts..lb. .70 - —
Persian Gulf, oxide, bbls., c.l., lb. No prices
Phloxin toner (see Red, Eosin-toner).
Phosphotungstic rhodamine, Y. kgs..lb. 4.15 - —
Purple lake, kgs.....lb. .60 - 1.00
Oxide, bbls., f.o.b. Bethlehem, Easton, E. St. Louis..lb. .03¼- —
Toner, kgs.....lb. 1.50 - 2.00
Scarlet ink toner, kgs., same basis alizarin lake..lb. .55 - —
Lake, kgs., same basis alizarin lake..lb. .35 - —
Spanish, oxide, Grade 1, c.l., bbls., f.o.b. N.Y..lb. .04¾- .07¾
Toluidin toner, kgs., same basis alizarin lake..lb. 1.05 - —
Turkey, c.l.f. New York.....lb. .14½- —
Tuscan, bbls., f.o.b. N.Y., E. St. Louis..lb. .11 - .40
Venetian, bbls., works.....lb. .0220- —
10%, bbls., works.....lb. .0245- —
15%, bbls., works.....lb. .2065- —
20%, bbls., works.....lb. .02¾- —
25%, bbls., works.....lb. .03 - —
30%, bbls., works.....lb. .03¼- —
35%, bbls., works.....lb. .0360- —
40%, bbls., works.....lb. .04 - —
Vermilion, Amer., bbls., f.o.b. N.Y..lb. .25 - .40
quicksilver, bbls.....lb. 3.05 - 3.15
Red dyes are listed under Dyes.
Red, precipitate,[3] NF, powd., fib. dms., 50 lbs. or more..lb. 3.26 - —
Red saunders wood, ground, bbls., lb. .35 - —
Resorcinol, tech., 200-lb. dms., frt. alld. E. of Miss..lb. .63 - —
smaller quantities, works..lb. .74 - —
USP, cryst., 100 lbs., dms., frt. alld. E. of Miss..lb. 1.80 - —
Rhatany root, ogs.....lb. .09 - .10
Rhubarb, whole, cs.....lb. 1.20 - 1.35
powd., bbls.....lb. 1.25 - 1.45
Riboflavin .....grain. .65 - .68
Rice bran, concentrate, 573-lb. dms., f.o.b. Cedartown, Ga., or Emeryville, Calif., seller's option..lb. .79 - —
Rochelle salt, cryst., bbls., 5,000 lbs., 1 ship't..lb. .43¼- —
smaller lots.....lb. .44 - —
powd., bbls., 5,000 lbs., 1 ship't..lb. .42½- —
smaller lots.....lb. .43 - —
Rose flowers, pale, bls.....lb. .35 - .50
red, bls.....lb. No prices
Rosemary flowers, bls.....lb. 1.55 - 1.60
leaves, Portuguese, bls.....lb. .18 - .19
Spanish, bls.....lb. .20 - .21
Rosin, gum, ex dock—
B, bbls.....100 lbs. 3.90 - —
D, bbls.....100 lbs. 4.05 - —
E, bbls.....100 lbs. 4.09 - —
F, bbls.....100 lbs. 4.12 - —
G, bbls.....100 lbs. 4.12 - —
H, bbls.....100 lbs. 4.13 - —
I, bbls.....100 lbs. 4.13 - —
K, bbls.....100 lbs. 4.13 - —
M, bbls.....100 lbs. 4.13 - —
N, bbls.....100 lbs. 4.16 - —
W. G., bbls.....100 lbs. 4.21 - —
W. W., bbls.....100 lbs. 4.25 - —
X, bbls.....100 lbs. 4.25 - —
Rottenstone, dom., bgs., c.l., f.o.b. mines..ton.25.50 - —
l.c.l., same basis.....ton.37.50 - —
import, lump, bbls.....lb. No prices
powd., bbls.....lb. No prices
Rue, bls.....lb. 1.45 - 1.50

S

Sabadilla seed, powd., bbls....lb. .33 - .34
Saccharin, dms., 100 lbs.....lb. 1.45 - —
cns., 25 lbs.....lb. 1.48 - —
Safflower, bls.....lb. No prices
Saffron, Mexican, bls.....lb. .55 - .56
Spanish, tins.....lb.32.50 -33.50
Safrol, cns.....lb. 2.25 - 2.45
dms.....lb. No prices
Sage,[1] Calif. leucophylla, whole, bls..lb. .55 - .57
rubbed, bgs.....lb. .65 - .67
powder, bgs.....lb. .75 - .77
Dalmatian type, dom., bls., lb. .90 - .94
Cyprus, bls.....lb. .34 - .35
Greek, bls.....lb. 1.60 - 1.70
Spanish, bls.....lb. .32 - .33
Sago flour, bgs.....lb. .05 - .05¾
Salicin, bots., 5 lbs.....lb. 8.08 - —
cns., 25 lbs.....lb. 7.75 - —
Salol, gran., bbls., 200 lbs.....lb. .90 - —
bxs., 25 lbs.....lb. .93 - —
kgs., 100 lbs.....lb. .90 - —
powd., fib. dms., 25 lbs.....lb. 1.02 - —
kgs., 100 lbs.....lb. 1.00 - —
Salt, rock, bgs., c.l., dlvd. N.Y. ton.14.20 - —
l.c.l., bgs., dlvd. N.Y...ton.17.00 -18.00
Vacuum, common, fine, bgs., c.l., dlvd. N.Y..ton.15.70 - —
l.c.l., dlvd. N.Y.....ton.19.40 -23.20
Chrome (see Chrome cake).
Saltcake, dom., bulk, works..ton.15.00 - —
import, bulk, c.i.f.....ton.16.00 Nom.

into the cauldron of war...

Pound by pound, ton by ton, carload by carload, America's scrap is coming in.

It can't come in too fast.

For scrap is the stuff of which the materials of war are made. The cheapest stuff and, for many uses, the best.

Soda ash is used to remove sulphur and other impurities from molten iron. It makes possible the production of sound, durable iron products even though increased percentages of scrap are used. It also permits the use of lower grade scrap.

Michigan Alkali Soda Ash, along with many other Michigan Alkali Products, is going to war in many ways, for many industries.

Let's all get in the scrap, and win!

MICHIGAN ALKALI COMPANY
WYANDOTTE, MICHIGAN

NEW YORK • CHICAGO • CINCINNATI • ST. LOUIS • CHARLOTTE • DETROIT
DISTRIBUTORS IN ALL PRINCIPAL CITIES
SODA ASH • CAUSTIC SODA • CHLORINE • BICARBONATE OF SODA • CALCIUM CARBONATE • CALCIUM CHLORIDE • DRY ICE

Saltpeter, dbl. refd., gran., bbls., 10-20 tons	100 lbs.	8.20 -	—
1- 9 tons	100 lbs.	8.25 -	—
less than ton lots	100 lbs.	8.60 -	—
powd., bbls., 10-20 tons	100 lbs.	9.20 -	—
1-9 tons	100 lbs.	9.35 -	—
less than ton lots	100 lbs.	9.80 -	—
Sanguinarine nitrate, bots	oz.	3.75 -	—
Santonin, cryst., cns	kilo.	210.00 -	220.00
Saponin, No. 1, cns	lb.	1.75 -	—
No. 2, cns	lb.	1.45 -	—
Sarsaparilla root, American, bls.	lb.	.25 -	.26
Honduras, bls	lb.	.59 -	.60
Mexican, bls	lb.	.20 -	.21
Sassafras, bark, ord., bls	sp.	.20 -	.21
select, bls	lb.	.31 -	.32
Savory, bls	lb.	.73 -	1.75
Saw palmetto berries, bgs	lb.	.09 -	.14
Scammony root, bgs	lb.	.07 -	.08
resin, lump, cns	lb.	.85 -	—
powd., bxs	lb.	.90 -	—
Scullcap, Eastern, bls	lb.	.25 -	.30
Western, bls	lb.	.17 -	.18
Schaeffer's salt, bgs	lb.	.46 -	—
Seidlitz mixture, bbls., 5,000 lbs., 1 shipment	lb.	.33¾-	—
smaller lots	lb.	.34¾-	—
kegs, 5,000 lbs., 1 shipm't	lb.	.34¼-	—
smaller lots	lb.	.34¾-	—
Selenium, pwd. A, 10-lb. tins	lb.	2.00 -	—
100-lb. cases	lb.	1.75 -	—
Senega root, spot, bls	lb.	.61 -	.62
Senna leaves, Alexandria, half leaf, bls	lb.	.22 -	.28
siftings, bgs	lb.	.21 -	.22
Tinnevelly, No. 1, bls	lb.	.16 -	.17½
2, bls	lb.	.12 -	.16
3, bls	lb.	.11 -	.14
powd., bbls., bxs	lb.	.15 -	.17
Pods, bls	lb.	.13 -	.16
Serpentaria root, bls	lb.	.70 -	.82
Sesame seed,[1] Chinese, hulled, bgs	lb.	.13 -	13½
Indian, natural, bgs	lb.	.08¼-	.08¾
hulled, bgs	lb.	.12 -	.12½
sterilized, bgs	lb	.13¾-	13¼
Shellac,[1,6] bleached, bonedry, bbls., 1,500 lbs. or more, f.o.b. N.Y.	lb.	.42½-	—
dlvd., Boston	lb.	.43½-	—
Chicago	lb.	.44 -	—
Pacific Coast	lb.	.46 -	—
refined, bbls., 1,500 lbs. or more, f.o.b. N.Y.	lb.	.48½-	—
dlvd., Boston	lb.	.49½-	—
Chicago	lb.	.50 -	—
Pacific Coast	lb.	.52 -	—
Shellac,[1,6] 100 bgs. or more, garnet, bgs.	lb.	.3890-	—
D.C., V.S.O., or Diamond 1, cs.	lb.	.4660-	—
Superfine, f.o.b. Boston, N.Y.	lb.	.3660-	—
dlvd., Chicago	lb.	.3710-	—
Pacific Coast	lb.	.3960-	—
T.N., f.o.b. Boston, N.Y.	lb.	.3550-	—
dlvd., Chicago	lb.	.3600-	—
Pacific Coast	lb.	.3850-	—
Shortening, trcs	100 lbs.	16.50	-17.00
Silica, amorph., dry-grd. 325 mesh, c.l., Ill., works.	ton.	17.00 -	—
l.c.l., same basis	ton.	20.00 -	—
400 mesh, c.l.	ton.	18.00 -	—
l.c.l., 5,000 lbs	ton.	19.00 -	—
smaller lots	ton.	20.00 -	—
wet-grd., 325 mesh, c.l., Ill., works.	ton.	18.00 -	—
l.c.l., same basis	ton.	21.00 -	—
400 mesh, c.l.	ton.	30.00 -	—
l.c.l., 5,000 lbs	ton.	35.00 -	—
smaller lots	ton.	38.00 -	—
96-98%, 325 mesh, c.l.	ton.	20.00 -	—
l.c.l., 5,000 lbs	ton.	21.50 -	—
smaller lots	ton.	23.00 -	—
99%, 325 mesh, c.l.	ton.	20.00 -	—
l.c.l., 5,000 lbs	ton.	22.00 -	—
smaller lots	ton.	25.00 -	—
medium-grd., 99% 325 mesh, l.c.l., 5,000 lbs.	ton.	25.50 -	—
smaller lots	ton.	27.00 -	—
hard-quartz, 99½%, 325 mesh, c.l.	ton.	13.50 -	—
l.c.l.	ton.	18.50 -	—
140 mesh, c.l.	ton.	11.00 -	—
l.c.l.	ton.	16.00 -	—

Silica prices are for bag packing f.o.b. works.

Silicon tetrachloride, CP, dms., works, 55 gals.	lb.	.27 -	—
10-gal. dms., same basis	lb.	.32 -	—
smaller pkgs	lb.	.75 -	1.25
tech., dms., 55 gals., works.	lb.	.22 -	—
10-gal dms., same basis	lb.	.27 -	—
smaller pkgs	lb.	.50 -	1.00
Silver, bullion	oz.	.44¾-	—
Govt. purchase, dom., metal.	oz.	.7111-	—
Govt. purchase,[5] foreign metal.	oz.	.44¾-	—
Cyanide, cns., 100 ozs	oz.	.41½-	—
Nitrate, 100-oz. bots	oz.	.32¾-	—
Nucleinate, bots., dms	oz.	.29 -	.34
Protelnate, bots., dms	oz.	.28 -	.33
Simarubra barks, bls	lb.	.55 -	.67
Skunk cabbage root, bls	lb.	.13 -	.14
Slate flour, bgs., c.l., works.	ton.	11.00	-12.00
l.c.l., works	ton.	12.00	-13.00
Sloe berries, bgs	lb.	.75 -	.80
Smalt, black, extra velvet, ctns.	lb.	.05 -	.06
Blue, ctns	lb.	.07 -	.08½
Snakeroot, Canada, bls	lb.	.66 -	.67
Soapbark, bls	lb.	.13 -	.14
crushed, bls., bbls	lb.	.16 -	.17
cut, imp., bls., bbls	lb.	.17 -	.18
dom., bbls	lb.	.10 -	.11
powd., bbls	lb.	.19 -	.20
Soda, acetate, anhyd., dms., dlvd.	lb.	.08½-	.10
flake, gran., powd., 60%, dms., c.l., dlvd.	lb.	.05 -	—
l.c.l., dlvd	lb.	.07 -	.10
USP, bbls., dlvd	lb.	.06 -	.07
Alginate, water soluble, refined, bbls., works.	lb.	.79 -	—
semi-refined, bbls., works.	lb.	.42 -	—
Aluminate, white soluble, c.l., bgs., frt. equald.	100 lbs.	7.50 -	—
dms., frt. equaled.	100 lbs.	7.75 -	—
Soda aluminate, white, soluble, l.c.l., bgs., frt. equald.	100 lbs.	8.40 -	—
dms., frt. equald.	100 lbs.	8.65 -	—
Antimoniate, bbls., dlvd., c.l.	lb.	.15 -	—
l.c.l., bbls., dlvd	lb.	.15½-	—
Arsenate,[6] dms., dealers, c.l., works.	lb.	.08 -	—
l.c.l., dms	lb.	.09¼-	.09¾
Arsenite,[6] dry, gray, dms., c.l., dealers, works.	lb.	.06¾-	—
l.c.l., dms., works	lb.	.07½-	.08½
white, dms., c.l., dealers, works.	lb.	.07¾-	—
l.c.l., works	lb.	.08½-	.09½

Soda arsenite, dry, gray, prices are ¾c. per pound higher in Chicago; 1c. per pound higher in Houston, Tex., and Colorado. White prices are 1c. per pound higher in Tex. and Colo.

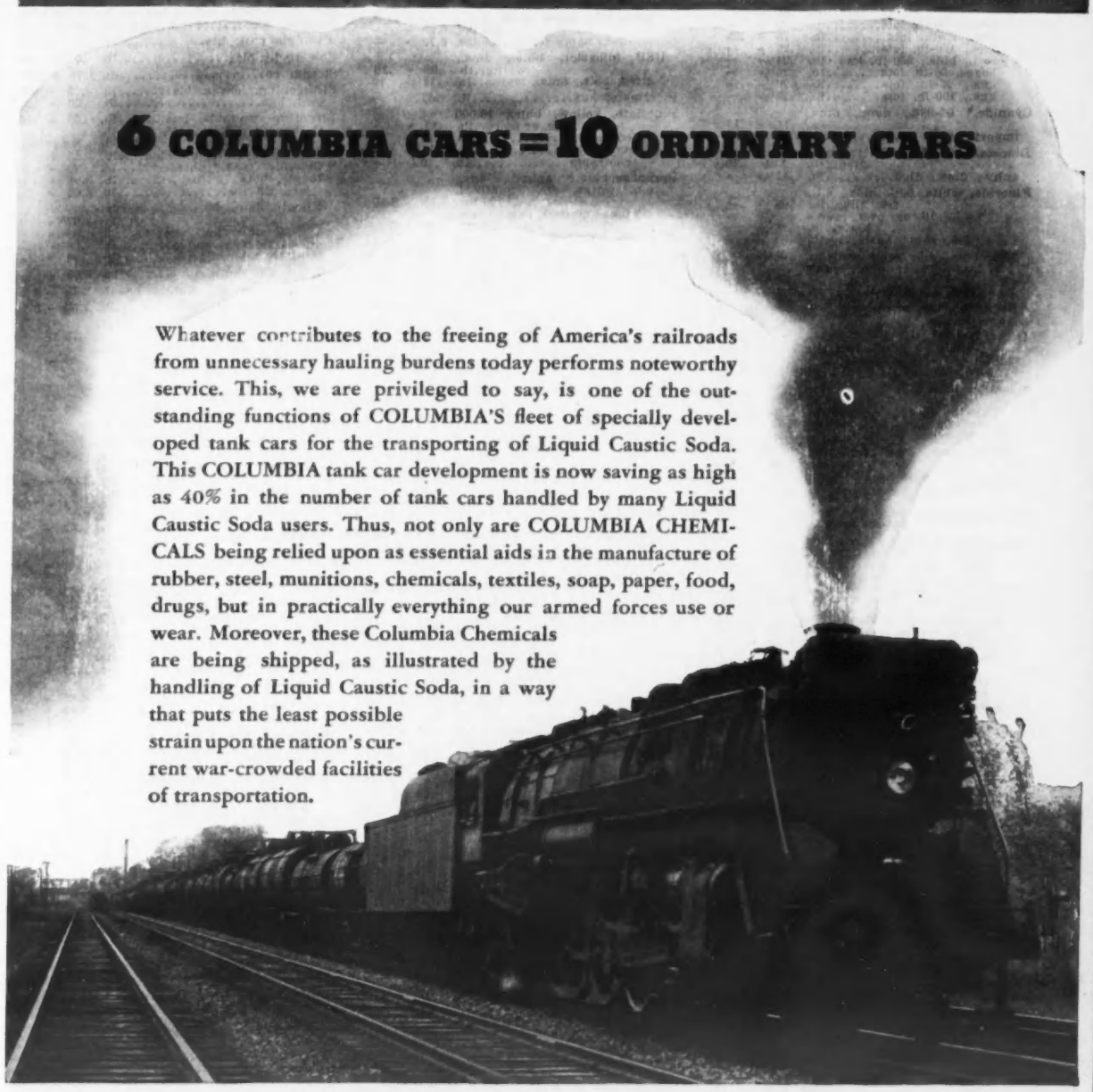
Soda ash, extra light, 58%, bbls., c.l., works	100 lbs.	1.45 -	—
l.c.l., Zone 1	100 lbs.	2.10	
2	100 lbs.	2.60 -	—
3	100 lbs.	2.65 -	—
4	100 lbs.	3.25 -	—
bulk, c.l.	100 lbs.	.90 -	—
Ash, dense, 58%, bgs., c.l., works.	100 lbs.	1.15 -	—
l.c.l., Zone 1	100 lbs.	2.18 -	—
2	100 lbs.	2.33 -	—
3	100 lbs.	2.58 -	—
4	100 lbs.	2.98 -	—
bblz., c.l., works	100 lbs.	1.35 -	—
l.c.l., Zone 1	100 lbs.	2.35 -	—
2	100 lbs.	2.50 -	—
3	100 lbs.	2.75 -	—
4	100 lbs.	3.15 -	—
bulk, c.l., works	100 lbs.	.95 -	—
extra light, 58%, bgs., c.l.	100 lbs.	1.05 -	1.13
l.c.l., Zone 1	100 lbs.	2.13 -	—
2	100 lbs.	2.28 -	—
3	100 lbs.	2.53 -	—
4	100 lbs.	2.93 -	—
light, 58%, bgs., c.l., works.	100 lbs.	1.05 -	1.13
l.c.l., Zone 1	100 lbs.	2.13 -	—
2	100 lbs.	2.28 -	—
3	100 lbs.	2.53 -	—
4	100 lbs.	2.93 -	—
bbls., c.l., works	100 lbs.	1.35 -	—
l.c.l., Zone 1	100 lbs.	2.35 -	—
2	100 lbs.	2.50 -	—
3	100 lbs.	2.75 -	—
4	100 lbs.	3.15 -	—
bulk c.l.	100 lbs.	.90 -	—

Soda ash l.c.l. prices are per 100 lbs. f.o.b. recognized warehouse point and include delivery in any quantity to cutsomer's truck within recognized local trading distance of seller's warehouse. The sales zones are:—Zone 1: All Northern U.S. E. of Miss. River and North of the Southern boundaries of Ky. and Va., including also St. Louis, Mo., and Davenport, Ia., parallel La., Miss., Ala., South of 31° Texas, E. of 100° Meridian and S. of 31° parallel and Fla., in Mo., N. H. and Vt.; special local zone prices apply for ship't to various countries. Zone 2: Ark. East of 93° Meridian; Neb. E. of 98° Meridian; Tex. N. of 31° parallel and E. of 100° Meridian (except Wichita Falls), Ala., La. and Miss N. of 31° parallel; Iowa (except Davenport), Ga., Minn., Mo. (except St. Louis), N. and S. C. and Tenn. Zone 3: Kansas, Neb., W of 98° Meridian, Tex., W. of 100° Meridian including Wichita Falls, but excluding El Paso), N. and S. D., Okla., Ark., W. of 93° Meridian. Zone 4: El Paso, Tex., Ariz., Colo., Idaho, Mont., Nev., N. M., Utah and Wyoming.

Soda, benzoate, tech., bbls., 4,000 lbs. or more	lb.	.39 -	—
1,000 to 3,900 lbs	lb.	.40 -	—
900 lbs. or less	lb.	.43 -	—
USP, bbls., fib., 4,000 lbs. or more	lb.	.46 -	—
1,000 to 3,900 lbs	lb.	.47 -	—
900 lbs. or less	lb.	.50 -	—
Bicarbonate, tech., bbls., c.l., works.	100 lbs.	1.70 -	—
bgs., c.l.	100 lbs.	1.55 -	—
l.c.l.	100 lbs.	1.90 -	—
USP, gran., bbls., c.l., works.	100 lbs.	2.25 -	—
l.c.l.	100 lbs.	2.60 -	—
powd., bbls., c.l., works,	100 lbs.	1.85 -	—
l.c.l., dlvd. N.Y.	100 bls.	2.51 -	—
kgs., c.l.	100 lbs.	2.10 -	—
l.c.l., dlvd. N.Y.	100 lbs.	2.76 -	—
Bichromate,[5,6] spot, c.l., works.	lb.	.07¾-	—
l.c.l., 6 csks. or 10 bbls. or over, works.	lb.	.07¼-	—
5 cks. or 9 bbls. or less, works	lb.	.07¾-	—
Bifluoride, bbls., c.l.	lb.	.11 -	—
10-bbl. lots	lb.	.11½-	.13
1-9 bbls	lb.	.12 -	—
kegs	lb.	.12½-	.14
Soda, bisulphite, powd., bbls., c.l., works.	100 lbs.	3.00 -	3.10
l.c.l., works	100 lbs.	3.50 -	3.60
solution, 32 deg., bbls., c.l., works.	100 lbs.	1.30 -	—
l.c.l., bbls., works.	100 lbs.	1.55 -	—
33 deg., bbls., c.l., works.	100 lbs.	1.35 -	—
l.c.l., bbls., works.	100 lbs.	1.60 -	—
35 deg., c.l., works.	100 lbs.	1.40 -	—
l.c.l., bbls., works.	100 lbs.	1.65 -	—
44 deg., bbls., works.	100 lbs.	1.55 -	—
l.c.l., bbls., works.	100 lbs.	1.80 -	—

COLUMBIA CHEMICALS

6 COLUMBIA CARS = 10 ORDINARY CARS



Whatever contributes to the freeing of America's railroads from unnecessary hauling burdens today performs noteworthy service. This, we are privileged to say, is one of the outstanding functions of COLUMBIA'S fleet of specially developed tank cars for the transporting of Liquid Caustic Soda. This COLUMBIA tank car development is now saving as high as 40% in the number of tank cars handled by many Liquid Caustic Soda users. Thus, not only are COLUMBIA CHEMICALS being relied upon as essential aids in the manufacture of rubber, steel, munitions, chemicals, textiles, soap, paper, food, drugs, but in practically everything our armed forces use or wear. Moreover, these Columbia Chemicals are being shipped, as illustrated by the handling of Liquid Caustic Soda, in a way that puts the least possible strain upon the nation's current war-crowded facilities of transportation.

ESSENTIAL INDUSTRIAL CHEMICALS

SODA ASH • CAUSTIC SODA • SODIUM BICARBONATE • LIQUID CHLORINE • SILENE* CALCIUM CHLORIDE • SODA BRIQUETTES MODIFIED SODAS • CAUSTIC ASH • PHOSFLAKE CALCENE** • CALCIUM HYPOCHLORITE

*Precipitated Calcium Silicate **Precipitated Calcium Carbonate

COLUMBIA CHEMICALS

PITTSBURGH PLATE GLASS COMPANY

COLUMBIA CHEMICAL DIVISION

GRANT BUILDING, PITTSBURGH, PA.

CHICAGO • BOSTON • ST. LOUIS • NEW YORK • CINCINNATI CLEVELAND • MINNEAPOLIS • PHILADELPHIA • CHARLOTTE

Bromide, USP, gran., works, 500 lbs..lb. .27 - .31
fiber dms., 100 lbs.....lb. .28 - .32
Cacodylate, 1, 5-lb. bots., works, lb.17.00 - —
Carbonate (see Soda ash, soda monohydrated, soda sal).
Caustic, flake, 76%, powd., ammo. process, bbls., c.l., works—100 lbs. 2.95 - —
dms., c.l., works..100 lbs. 2.70 - —
l.c.l., Zone 1....100 lbs. 3.55 - 4.90
2 .....100 lbs. 3.70 - 5.05
3 .....100 lbs. 3.95 - 5.30
4 .....100 lbs. 4.35 - 5.70
electro process, dms., c.l., works..100 lbs. 2.70 - —
l.c.l., same zinc prices as ammonia process.
liquid, 47-49%, buyers' tanks, works..lb. 1.92½- —
sellers' tanks, works..... 100 lbs. 1.95 - —
70%, buyers' tanks, works, 100 lbs. 1.97½- —
sellers' tanks, works..... 100 lbs. 2.00 - —
solid, 76% ammon., process, dms., c.l., works..100 lbs. 2.30 - —
l.c.l., Zone 1....100 lbs. 3.15 - —
2 .....100 lbs. 3.30 - —
3 .....100 lbs. 3.55 - —
electro process, dms., c.l., works..100 lbs. 2.80 - —
Soda, caustic, solid, electro process, dms., l.c.l., same zone prices as ammon. process. Caustic soda, l.c.l., prices are on the same basis as those for soda ash. The sales zones are also the same.
Chloride (see Salt).
Chlorate,[4] dom., cryst., bgs., c.l., works..lb. .06½- —
l.c.l., works.....lb. .06½- —
powd., bgs., c.l., works..lb. .06½- —
l.c.l., works.....lb. .07 - .08½
Chromate,[3,4] c.l., works.....lb. .08¾- —
l.c.l., 6 cks., 10 bbls. or over, works..lb. .09½- —
Citrate, USP VIII, 225-lb. bbls. lb. .18½- —
dms., 50-lb. lots.....lb. .20½- —
25-lb. lots.....lb. .22½- .23½
dms., kgs., 100-lb. lots...lb. .19½- —
USP, XI, gran., bbls., 250-lb. lots..lb. .24 - —
boxes, 50-lb. lots.....lb. .26 - —
cns., 25-lb. lots.....lb. .28 - .29
kgs., 100-lb. lots.....lb. .25 - —
powd., bbls., 250-lb. lots..lb. .24½- —
boxes, 50-lb. lots.....lb. .26½- —
cns., 25-lb. lots.....lb. .29½- —
kgs., 100-lb. lots.....lb. .25½- —
Cyanide,[4] 96-98%, dom., dms, lb. .14 - .15
imports, 90%, cs.....lb. No prices
Diacetate, 53-55% acidity, bbls., dlvd..lb. .09½- .10½
anhy., dms., dlvd.....lb. .12½- —
Fluoride, white, 30%, bbls., c.l., frt. allw..lb. .08 - —
l.c.l., 10 or over, same basis..lb. .06½- —
1-9, same basis.....lb. .09 - —
95%, bbls., c.l., same basis.lb. .06¾- —
l.c.l., 10 or over, same basis..lb. .08¾- —
1-9, same basis.....lb. .09¼- —
Soda fluoride prices at Los Angeles are f.a.s. works.
Glycerophosphate, NF, cryst., bbls., 1,000-lb. lots..lb. 1.25 - 1.32
100-lb. lots.....lb. 1.40 - 1.47
cns., 25 lbs.....lb. 1.65 - 1.67
powd., bbls., 1,000-lb. lots. lb. 1.25 - 1.32
100-lb. lots.....lb. 1.40 - 1.47
cns., 25 lbs.....lb. 1.72 - —
solution, cbys., cns.....lb. .82 - .83
Hydrosulphite, dms., frt. alld., lb. .17 - .18
Hydroxide, USP, sticks, dms., 100 to 1,000-lb. lots..lb. .24 - .27
Hypophosphite, N. F., cns., 100-lb. lots..lb. .67 - —
Hyposulphite, cryst., large bgs., works, frt. equald..100 lbs. 2.25 - —
bbls., same basis..100 lbs. 2.45 - —
l.c.l., bgs., works, frt. equald..100 lbs. 2.50 - —
bbls., same basis..100 lbs. 2.70 - —
pea, bgs., c.l., works.100 lbs. 2.60 - —
bbls., works.....100 lbs. 2.80 - —
dms., works.....100 lbs. 3.10 - —
pea 5,000 lbs. and over, bgs., works..100 lbs. 2.75 - 3.00
bbls., works.....100 lbs. 2.95 - 3.20
dms., works.....100 lbs. 3.25 - 3.00
2,500 to 5,000 lbs., bgs., works..100 lbs. 2.85 - 3.10
bbls., works.....100 lbs. 3.05 - 3.30
dms., works.....100 lbs. 3.35 - 3.60
500 to 2,500 dms., works. 100 lbs. 3.10 - 3.25
bbls., works.....100 lbs. 3.26 - 3.55
dms., works.....100 lbs. 3.60 - 3.85
less than 500 lbs., bgs., works..100 lbs. 3.70 - 3.95
bbls., works.....100 lbs. 3.90 - 4.15
dms., works.....100 lbs. 4.20 - 4.45
Iodate, jars.....lb. 5.40 - —
Iodide, jars.....lb. 2.42 - —
bots.....lb. 2.52 - 2.57
Mandelate, 100-lb. dms.....lb. 3.25 - —
Metanilate, bgs.....lb. .40 - —
Metasilicate, anhyd., dms., c.l., works, frt. equald..100 lbs. 4.00 - —
15 dms. and over, dlvd. N.Y. 100 lbs. 4.20 - —
3-14 dms., same basis..... 100 lbs. 5.05 - —
1-2 dms., same basis.100 lbs. 5.30 - —
gran., bbls., c.l., works....lb. 2.50 - —
10 bbls. and over, dlvd. N.Y. lb. 2.30 - —
1-9 bbls., dlvd. N.Y.....lb. 2.55 - —
Molybdate,[4] anhyd., kgs., works..lb. .47 - —
Monohydrated, bbls., N. Y. 100 lbs. 3.00 - —
works .....100 lbs. 2.55 - —
Naphthionate, bbls.....lb. .60 - —
Nitrate,[4] dom., c.l., 100-lb. bgs., dlvd., f.o.b. cars Hopewell, Va(ton.30.05 - —
200-lb. bgs., same basis. ton.29.35 - —
bulk, f.o.b. Hopewell, Va..ton.27.00 - —
Soda, nitrate, imp., c.l., 100-lb. bgs., f.o.b. cars, Atl. Gulf, Pac. warehouses, rail or shipment..ton.33.00 - —
200-lb. bgs., same basis... ton.32.40 - —
bulk, same basis.....ton.30.60 - —
refd., gran., bbls., 10 tons. 100 lbs. 3.60 - —
1-9 tons.....100 lbs. 3.75 - —
smaller lots.....100 lbs. 4.00 - —

Nitrite, 96-98%, dom., bbls., c.l., works, frt. equalized..lb. .06¾- —
West Coast, f.o.b. ports. 100 lbs. 8.00 - 8.65
l.c.l. .....100 lbs. 5.90 -11.90
Soda nitrite l.c.l. prices range represents delivery at various points.
Orthosilicate, anhyd., dms., c.l., works, frt. equald..lb. 4.50 - —
15 dms. and over, same basis..lb. 5.45 - —
3-14 dms., same basis....lb. 5.60 - —
1-2 dms., same basis....lb. 5.85 - —
flake, dms., c.l., works..... 100 lbs. 3.15 - —
10 bbls. and over, dlvd. N.Y.C..100 lbs. 4.30 - —
1-9 bbls., same basis.100 lbs. 4.55 - —
Oxalate, neut., bbls.....lb. .09 - —
Perborate, NF, bbls., c.l., works. lb. .14¾- —
l.c.l., works.....lb. .15¼- —
Pentachlorophenate briquets, single bgs., works..lb. .26 - —
70 lbs., bgs., works.....lb. .20 - —
490 lbs., bgs., works.....lb. .18 - —
powd., 100 lbs., kgs., works.lb. .19 - —
500 lbs., bgs., works.....lb. .17 - —
Phosphate, dibasic, anhyd., bgs., c.l., works..100 lbs. 6.00 - 6.25
l.c.l., works.....100 lbs. 6.50 - 7.25
bbls., c.l., works....100 lbs. 6.20 - 6.45
l.c.l., works.....100 lbs. 6.70 - 7.45
cryst., tech., bgs., c.l., works. 100 lbs. 2.55 - 2.70
l.c.l., works.....100 lbs. 2.95 - 3.45
bbls., c.l., works....100 lbs. 2.75 - 2.90
l.c.l., works.....100 lbs. 3.15 - 3.65
monobasic, anhyd., c.l., works 100 lbs. 7.25 - 8.25
l.c.l., works.....100 lbs. 8.00 - 9.00
bbls., c.l., works.....100 lbs. 7.45 - 8.45
l.c.l., works.....100 lbs. 8.20 - 9.20
tribasic, bgs., c.l., works. 100 lbs. 2.70 - —
l.c.l., works.....100 lbs. 3.45 - —
bbls., c.l., works.....100 lbs. 2.90 - —
l.c.l., works.....100 lbs. 3.65 - —
kegs, c.l., works.....100 lbs. 3.40 - —
l.c.l., works.....100 lbs. 4.15 - —
anhydrous, bgs., c.l., works, frt. equald..100 lbs. 6.00 - —
l.c.l., same basis..100 lbs. 6.50 - —
bbls., c.l., same basis..... 100 lbs. 6.20 - —
l.c.l., same basis..100 lbs. 6.70 - —
USP (dibasic), bbls., dms., works..lb. .08 - .10
dried, bbls., dms., works..lb. .11½- .12
Picramate, kgs.....lb. .65 - —
Prussiate, yellow, bbls., 10,000 lbs. or more..lb. .11 - —
contracts .....lb. .10 - —
smaller lots.....lb. .11¼- —
contracts .....lb. .10¼- —
Pyrophosphate,[3] anhyd., bgs., c.l., works, frt. equalized. 100 lbs. 5.25 - 6.10
5 tons and over, same basis. 100 lbs. 5.40 - 6.25
less than 5 tons, same basis..100 lbs. 5.75 - 6.30
bbls., c.l., works, frt. equalized..100 lbs. 5.45 - 6.30
5 tons and over, same basis. 100 lbs. 5.60 - 6.45
less than 5 tons, same basis..100 lbs. 5.95 - 6.80
Ricinoleate, tech., bbls.....lb. .12 - —
Sal, bgs., dlvd. N.Y....100 lbs. 1.35 - —
works .....100 lbs. 1.10 - —
bbls., dlvd. N.Y.....100 lbs. 1.40 - —
works .....100 lbs. 1.20 - —
Salicylate, bxs.....lb. .52 - .55
Sesquicarbonate, bgs., c.l., works..100 lbs. 1.50 - —
bbls., c.l., works...100 lbs. 1.70 - —
bbls., l.c.l., Zone 1....100 lbs. 2.70 - —
2 .....100 lbs. 2.85 - —
3 .....100 lbs. 3.10 - —
4 .....100 lbs. 3.50 - —
Soda sesquicarbonate l.c.l. prices are on same basis as those for soda ash and caustic soda. The sales are also the same.
Sesquisilicate, dms., c.l., works, 100 lbs. 3.05 - —
100 lbs. 4.05 - —
10 bbls. or over, dlvd. N.Y.C.
1-9 bbls.....100 lbs. 4.30 - —
works..100 lbs. .80 - —
Silicate, 40° turbid, dms., c.l., works..100 lbs. .80 - —
l.c.l., 5 or more, works, 100 lbs. 1.05 - —
1 to 4, works....100 lbs. 1.20 - —
tanks, wks.....ton.13.00 - —
52°, dms., c.l., works..100 lbs. 1.40 - —
l.c.l., 5 or more, works, 100 lbs. 1.65 - —
1 to 4, works....100 lbs. 1.80 - —
tanks, wks.....ton.25.00 - —
Silicofluoride, dom., bbls....lb. .09 - .14½
Stannate, dms.....lb. .83½- .86½
Stearate, lump, powd., bbls., works..lb. .19 - .24
Sulphate, anhyd., bgs., bbls., c.l., works..100 lbs. 1.70 - 1.90
5 tons or over, works. 100 lbs. 1.95 - 2.15
less than 5 tons, works.. 100 lbs. 2.20 - 2.40
cryst. (see Glauber's salt), NF, VI, dessicated, powd., bbls..lb. .07 - .07½
USP, cryst., gran., bbls....lb. .10 - .10½
Sulphide, cryst., bbls., c.l., works..100 lbs. 2.40 - —
l.c.l., 5 tons or over, dlvd. 100 lbs. 2.90 - —
less than 5 tons, dlvd. 100 lbs. 3.15 - —
solid, bbls., c.l., works.100 lbs. 3.15 - —
l.c.l., 5 tons or over, dlvd. 100 lbs. 3.65 - —
less than 5 tons, dlvd. 100 lbs. 3.90 - —
Sulphite, cryst., 100-lb. bgs., works..lb. 2.10 - 2.35
bbls. .....100 lbs. 2.30 - 2.55
powd., bbls., c.l.....100 lbs. 5.25 - —
l.c.l., 5 or more....100 lbs. 5.50 - —
1 to 4.....100 lbs. 6.00 - —
Sulphocarbolate, gran., bbls., dms..lb. .26 - .28
Sulphocyanide, C.P., dms....lb. .55 - .65
Soda, sulphohydrate, liquid, 38%, basis 100% dms., c.l., f.o.b. works..lb. .05½- —
l.c.l., works.....lb. .06 - —
single dm. lots, works lb. .06 - —
tanks, works.....lb. .04½- —
flake, 70-72%, dms., c.l., works. lb. .04½- —
l.c.l., works.....lb. .05 - —

Sulphoricinolate, bbls.....lb. .12 - —
Thiosulphate (see Hyposulphite).
Tungstate,[6] CP, kgs.....lb. No prices
tech, kgs.....lb. 1.35 - 1.50
Soda-Formaldehyde, sulphoxylate, standard cont. (125-250 lbs.), lb. .19 - .22
Solvent, naphtha,[3] dms., wks.gal. .31 - —
tanks, E. of Omaha, frt. alld. gal. .27 - —
W. Coast, f.o.b. Minequa, Colo..gal. .27 - —
high-flash, dms., works..gal. .32 - —
tanks, E. of Omaha, frt. alld..gal. .27 - —
Sorbitol, com'l. dms., works. .lb. .17¾- —
Soybean meal, 44% protein, sacks, New York rate points, Nov. del..ton.38.25 Nom.
same basis, Baltimore rate points, Nov. del..ton.37.65 Nom.
protein, alpha, bgs., c.l., works, lb. .17 - —
l.c.l., 10-20 tons, works....lb. .17½- —
100-20,000 lbs, works.....lb. .17½- —
smaller lots, works.....lb. .21 - —
Sparteine sulphate, bots. cns..oz. 3.25 - 3.90
Spearmint leaves, bls.....lb. .35 - .36
Spikenard root, bls.....lb. .26 - .27
Spruce extract, reg., bbls., c.l., works..lb. .02½- —
tanks, works.....lb. .01½- —
powd., super, bgs., c.l., works. lb. .04½- —
Squawvine, leaves, bls.....lb. .14 - .15
Squill, red, powd.....lb. .85 - .88
White, bls.....lb. .16 - .18
powd., bbls., bxs.....lb. .26 - .28
St. Ignatius beans, bgs.....lb. .43 - .60
St. John's Bread, edible, bls..lb. .24 - .35
Starch, corn, pearl, bgs., f.o.b. Chicago..100 lbs. 3.10 - —
dlvd., N. Y.....100 lbs. 3.47 - —
powd., bgs., f.o.b. Chicago.. 100 lbs. 3.20 - —
dlvd., N. Y.....100 lbs. 3.57 - —
Potato, dom., bgs., c.l.....lb. .0637- —
l.c.l. .....lb. .0760- —
import, bgs.....lb. No prices
Rice, bgs.....lb. .09 - .10
Sweetpotato, bgs.....lb. .06¼ Nom.
bbls. .....lb. .07 Nom.
Wheat, thick, boil, bgs.....lb. .05 - —
Starch iodide bots.....lb. 1.87 - —
Staveacre, seed, bgs.....lb. No prices
Stearin, oleo.....lb. .1054- —
Stillingia root, bls.....lb. .11 - .12
Stoneroot, bls.....lb. .07½- .08
Storax, cs.....lb. 1.75 - 1.80
Stramonium leaves, bls.....lb. .25 - .26
seed, bgs.....lb. .20 - .21
Strontium bromide, cns.....lb. .53 - .55
Carbonate, NF, IV, 250-lb. bbls..lb. No prices
tech., 90% precip., bbls....lb. .25 Nom.
Chloride, tech., bbls.....lb. .23 - .25
Iodide, bots., 5 lbs.....lb. 3.06 - —
jars, 25 lbs.....lb. 3.00 - —
Nitrate, dom., bbls., c.l., works. lb. .07¾- —
25 bbls. and over.....lb. .08¼- —
1-24 bbls. and over.....lb. .08¾- —
Oxalate, bbls.....lb. .44 - —
Strophantin, bots.....oz.30.00 - —
Strophanthus seed, Kombe, bgs.lb. 2.75 - 3.95
Styrolyl, acetate, bots.....lb. 2.50 - 3.10
Strychnine, cryst., cns., 100-oz. lots..oz. .70 - —
Acetate, 25-oz. cns., 100-oz. lots..oz. .88 - —
Arsenate, 25-oz. cns., 100-oz. lots..oz. .91 - —
Arsenite, 25-oz. cans, 100-oz. lots..oz. .88 - —
Glycerophosphate, 25-oz. cns., 100-oz. lots..oz. .80 - —
Hydrochloride, 25-oz. cns., 100-oz. lots..oz. .88 - —
Hypophosphite, 25-oz. cns., 100-oz. lots..oz. 1.00 - —
Nitrate, 25-oz. cns., 100-oz. lots. oz. .82 - —
Phosphate, 25-oz. cns., 100-oz. lots..oz. .89 - —
Sulphate, cryst., cns., 100-oz. lots..oz. .58 - —
powd., cns., 100-oz. lots.oz. .48 - —
Sucrose Octa-acetate, C.P. grade, bbls., l.c.l., works..lb. .55 - —
denat., bbls., l.c.l., works..lb. .45 - —
tech., bbls., l.c.l., works.....lb. .40 - —
Sugar coloring, bbls.....gal. .70 - 1.40
Milk, bbls., c.l.....lb. .25 - —
l.c.l., 10 or over.....lb. .26 - —
less than 10.....lb. .27 - —
Sulfadiazine, tablets, bots., 50's, ea. 4.86 - —
100's .....ea. 8.45 - —
1,000's .....ea.72.00 - —
Sulfaguanidine, 3.5-gm. bot..doz. 2.50 - —
4-oz. bots.....ea. 3.10 - —
1-lb. bots.....ea.30.00 - —
Sulfanilamide, 5 lbs., bots....lb. 1.45 - —
5lb. dms., 1,000 lbs., 1 delivery, lb. 1.00 - —
100 lbs.....lb. 1.05 - —
25-lb. lots.....lb. 1.20 - —
Sulfapyridine, powd., bots., tins.. lb. 7.50 - 8.00
Sulfathiazole, 1,000-lb. lots., dms. lb. 4.00 - —
500-lb. lots, dms.....lb. 4.10 - —
100-lb. lots, dms.....lb. 4.15 - —
25-lb. tins.....lb. 4.30 - —
1-5-lb. bots.....lb. 4.45 - 4.50
Sesquihydrate, prices same as sulfathiazole.
Sulphonethylmethane, kgs.....lb. 6.75 - 6.80
Sulphonmethane, kgs.....lb. 5.25 - —
Sulphur, crude, bulk, f.o.b. cars, mines, contracts..long ton.16.00 - —
Sulphur, flowers, USP, bgs., c.l., 100 lbs. 3.30 - —
l.c.l. .....100 lbs. 3.80 - —
bbls., c.l.....100 lbs. 3.65 - —
l.c.l. .....100 lbs. 4.15 - —
flour, comm'l bgs., c.l...100 lbs. 1.90 - —
l.c.l. .....100 lbs. 2.40 - —
refined, cast, bgs., c.l...100 lbs. 2.45 - —
l.c.l. .....100 lbs. 2.95 - —
heavy, USP, bgs., c.l..100 lbs. 2.85 - —
l.c.l. .....100 lbs. 3.35 - —
bbls., c.l.....100 lbs. 3.20 - —
l.c.l. .....100 lbs. 3.70 - —
light, USP, bgs., c.l...100 lbs. 2.95 - —
l.c.l. .....100 lbs. 3.45 - —
bbls., c.l.....100 lbs. 3.30 - —
l.c.l. .....100 lbs. 3.80 - —
lumps, bgs., c.l.....100 lbs. 2.45 - —
l.c.l. .....100 lbs. 2.95 - —
bbls., c.l.....100 lbs. 2.80 - —
l.c.l. .....100 lbs. 3.30 - —
rolls, bgs., c.l.....100 lbs. 2.65 - —
l.c.l. .....100 lbs. 3.15 - —

Prices at the mine for various grades refined sulphur 50c. less per 100 pounds.

Sulphur, rubbermakers, comm'l, 99½%, bgs., c.l., frt. alld. 100 lbs. 2.20 - —
refined, 100%, bgs., c.l., frt. alld..100 lbs. 2.55 - —
Chloride, 55-gal. dms., c.l...lb. .03 - .03¼
l.c.l., dms., works....lb. .04 - .04¼
10-gal. dms., c.l.....lb. .07 - .07¼
l.c.l. .....lb. .08 - .08¼
Dioxide, liquid, com'l, cyls. works..lb. .07 - .08
multi-unit, cars, works.lb. .04½- .06
tanks, works.....lb. .04 - .06
refrigeration, cyls., works.lb. .13 - .21
multi-unit cars, works..lb. .06½- —
Iodide, bots., jars.....lb. 3.90 - 4.05
Precipitated, USP, bbls.....lb. .18 - .27
Sumac, grd., Sicilian, f.a.s...ton. No prices
leaf, f.a.s.....ton. No prices
extract, bbls., No. 1.....lb. .08 - —
No. 2.....lb. .07 - —
stainless, bbls.....lb. .09 - .11
Berries, bgs.....lb. .12 - .13
Sunflower seed, Calif., large, bgs., lb. .07½- .08
medium, bgs.....lb. .07¼- .07¾
poultry .....lb. .07 - .07½
Superphosphate, run-of-pile, basis 16% a.p.a., bulk, f.o.b. cars, boats, Balto..unit-ton. .60 - .64
net ton. 9.60 -10.24
guaranteed 16% a.p.a., bulk, plus flattening charge of 50c., unit-ton. .63¾- .67½
net ton.10.10 -10.74
20% a.p.a., bulk, same basis, spot..unit-ton. .63¾- .68
net ton.12.75 -13.60
triple, bulk, f.o.b. cars, Balto., spot..unit-ton. .85 - —

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Talc, dom., aluminum flake-type, grd., c.l...ton.12.50 -24.50
l.c.l. .....ton.16.50 -30.00
Calif., c.l.....ton.17.50 -43.00
N. Y., fibrous, 325 mesh, 93-94%, c.l...ton.13.00 -18.00
99-99½%, c.l.....ton.15.25 -19.25
99.95%, c.l.....ton.17.00 -21.00
coarse, off-color, c.l.....ton.13.00 - —
Pennsylvania, c.l.....ton.11.00 -13.50
l.c.l. .....ton.12.00 -14.50
Vermont .....ton.14.00 - —
l.c.l. .....ton.15.00 - —
imp., Canadian, c.l., dlvd. N. Y. ton.24.00 -30.00
French .....ton. No prices
Italian .....ton. No prices
Talc, domestic, is quoted at the mills in bag packaging.
Tallow,[5,6] edible, tanks.....lb. .06¾- —
ined., extra, tanks.....lb. .08¾- —
special, tanks.....lb. .08½- —
sulphonated, 85% (24% fat), dms., c.l..lb. .05¾- —
l.c.l. .....lb. .06¾- —
50% (43% fat), dms., c.l..lb. .06¾- —
l.c.l. .....lb. .07¾- —
50% (48% fat), dms., c.l..lb. .07¾- —
l.c.l. .....lb. .08¾- —
Tamarind, No. 1, bbls.....lb. .10 - .12
kegs .....lb. 7.45 - —
Tankage, dom., fertilizer, animal, bulk, basis N.Y. unit-ton. 4.50 & .10
grd., 9% ammon., 10% b.p.l., 10-11% ammon., 15% b.p.l., bulk, basis Chi. unit-ton. 4.00 & .10
feeding, unground, 9-11% ammon., bulk, basis N. Y., unit-ton. 5.10 - —
feeding, unground, bulk, Chicago..unit-ton. 5.53 - —
Tankage, import, S. Amer., 10-12% ammon., 15% b.p.l., bulk, c.i.f. port.unit-ton. Nominal
Tansy leaves, bls.....lb. .23 - .24
Tapioca flour, Brazil, bgs.....lb. .03¾- .06½
Java, bgs.....lb. .04¾- .07¼
Tar acid oil,[6] 16%, dms., c.l., works..gal. .27½- —
l.c.l., same basis.....gal. .29½- —
25%, dms., c.l., works.....gal. .31½- —
l.c.l., same basis.....gal. .33½- —
Tar, pine, retort, dms., dlvd. E. cities..gal. .30 - .33
tanks, dlvd. E. cities....gal. .24¼- —
Tarragon herb, bgs.....lb. 1.70 - 1.75
Tartar emetic, tech., fine gran. or powd., bbls., kgs., 5 or more..lb. .47¾- —
less than 5.....lb. .48 - —
dms. .....lb. .48¾- .51
USP, powd., bbls.....lb. .52¾- .53
Terpin hydrate, cryst., bbls., dms., lb. .70 - .72
powd., bbls., dms.....lb. .75 - .77
Terpineol, CP, dms.....lb. .48 - —
alpha, denat. grade, dms., c.l., works, net wght..lb. .17 - —
Terpinyl acetate, cns.....lb. .87 - —
dms. .....lb. .85 - —
Terra alba (see Gypsum).
Tetrachlorethane, dms., works.lb. .08 - 08½
Tetrachlorethylene, CP, dms...lb. .21½- —
tech. (see Perchlorethylene).
Tetralin, dms.....lb. .19 - —
Tetrasodium pyrophosphate (see Soda pyrophosphate).
Thallium sulphate, 99% pure, bots., works..lb.12.50 - —
Theobromine[6] .....lb. 2.65 - —
Sodiosalicylate,[6] dms.....lb. No prices
Thiamine hydrochloride, bots., cns., 100 grams or more..gram. .37 - —
smaller lots.....gram. .40 - —
Thiocarbanilide, dms. .....lb. .24 - —
Thiourea, CP, dms.....lb. .55 - .56
Thorium, nitrate, cs., works...lb. 2.00 - —
Thyme,[1] French, bls.....lb. .89 - 1.62
Morocco, bls.....lb. .21 Nom.
Spanish, bls.....lb. .24 - .25
Thymol, cns., 25 lbs.....lb. 2.75 - 3.00
Iodide, kgs., 50 lbs.....lb. 3.40 - —
25 lbs.....lb. 3.50 - —
Timbo root (see Cube root).
Tin chloride, anhydrous.....lb. .48 - .48½
Crystals, bbls., bgs.....lb. .39 - .39½
Metal,[1,6] Straits.....lb. .52 - —
Oxide, bbls.....lb. .55 - —
Tetrachloride, anhyd., bbls...lb. No prices
Titanium[1] dioxide, bgs., c.l. 20 tons)..lb. .14½- —
l.c.l., 5 tons, single delivery, lb. .14¾- —
1,000-9,999 lbs.....lb. .15 - —
50-999 lbs.....lb. .15½- —
bbls., c.l. (20 tons).....lb. .14¾- —
l.c.l., 5 tons, single delivery, lb. .15 - —
1,000-9,999 lbs.....lb. .15½- —
50-999 lbs.....lb. .15½- —
non-chalking, bgs., c.l (20 tons). lb. .16½- —
l.c.l., 5 tons, single delivery, lb. .16¾- —
1,000-9,999 lbs.....lb. .17 - —
50-999 lbs.....lb. .17½- —
bbls., c.l. (20 tons).....lb. .16¾- —

Titanium, dioxide, non-chalking, bbls., l.c.l., 5 tons, single delivery..lb. .17 - —
1,000-9,999 lbs.....lb. .17½- —
50-999 lbs.....lb. .17½- —
chalk-resistant, bgs., c.l. (20 tons)..lb. .15 - —
l.c.l., 5 tons, single delivery, lb. .15½- —
1,000-9,999 lbs.....lb. .15½- —
50-999 lbs.....lb. .15½- —
bbls., c.l. (20 tons).....lb. .15¼- —
l.c.l., 5 tons, single delivery, lb. .15½- —
1,000-9,999 lbs.....lb. .15¾- —
50-999 lbs.....lb. .16 - —
barium or magnesium base, bgs., c.l. (20 tons)..lb. .05¾- —
l.c.l. .....lb. .06 - —
bbls., c.l. (20 tons).....lb. .06 - —
l.c.l. .....lb. .06¼- —
calcium base, bgs., c.l. (20 tons), lb. .05½- —
calcium-rutile base, bgs., c.l. (20 tons)..lb. .05½- —
l.c.l. .....lb. .05¾- —
bbls., c.l. (20 tons).....lb. .05¾- —
l.c.l. .....lb. .06 - —

Carload prices are f.o.b. factories with actual freight paid. Less than carload prices are f.o.b. factories or ex warehouse with actual freight or trucking paid, except on the Pacific Coast, where they are f.o.b. warehouses. Pacific Coast prices are ¼c. per lb. higher than the above. When shipped in barrels, prices are ¼c. per pound higher.

Titanium tetrachloride, CP, dms., works, 55 gals..lb. .57 - —
10-gal. dms., same basis..lb. .65 - —
5-gal. dms., same basis..lb. .70 - —
smaller pkgs.....lb .90 - 1.25
technical, dms., works, 55 gals..lb. .32 - —
10-gal. dms., same basis..lb. .40 - —
5-gal. dms., same basis..lb. .45 - —
smaller pkgs.....lb. .65 - 1.00
Toluidin base, distilled, kgs....lb. .96 - —
Tolu, balsam. cns.....lb. .85 - .95
Toluidin, mixed, dms. .....lb. .26 - —
Toluol,[3,7,8] (toluene), 2° indus., dms., returnable..gal. .33 - —
tanks, E. of Omaha, frt. alld., gal. .28 - —
W. Coast, f.o.b. Minnequa, Colo..gal. .28 - —
1° nitration,[8] dms., returnable, gal. .34½- —
tanks, E. of Omaha, frt. alld., gal. .29½- —
W. Coast, f.o.b. Minnequa, Colo..gal. .29½- —
Tonga, NF, 50% bark and vine, bls..lb. .90 - .96
Tonka beans, Angostura, cks..lb. 2.50 - 3.00
Brasilian Surinam. cs.....lb. .95 - 1.10
Totaquine, USP XII, 100 oz. containers..oz. .40 - —
25 oz. containers.....oz. .43 - —
5 oz. containers.....oz. .45 - —
smaller containers .....oz. .45 - .50
bulk .....oz. .50½- —
Triacetin, dms.....lb. .26 - —
Trimyl borate, dms., l.c.l., works, lb. .33 - —
Triamylamine, dms., c.l., works, lb. .98 - —
l.c.l. .....lb. 1.01 - —
Tributylamine, dms., c.l., works, lb. .78 - —
l.c.l. .....lb. .81 - —
Tributyl citrate, ton lots, 475-lb. dms..lb. .29 - —
single dms.....lb. .31 - —
smaller lots.....lb. .40 - —
Phosphate, dms., l.c.l., divd..lb. .47 - —
cns., works.....lb. .51 - —
Trichlorobenzene, dms., c.l., frt. alld..lb. .06 - —
l.c.l., same basis.....lb. .06½- —
tanks .....lb. .07½- —
Trichlorethylene,[8] Zone 1, dms., c.l., works, frt. alld..lb. .06 - —
l.c.l., same basis.....lb. .06½- —
Zone 2, dms., c.l., works, frt. alld..lb. .06½- —
l.c.l., same basis.....lb. .09 - —
Zone 3, c.l., works, frt. alld..lb. .09 - —
l.c.l., same basis.....lb. .09½- —
Zone 4, dms., c.l., f.o.b. stock points..lb. .09 - —
l.c.l., same basis.....lb. .09½- —

All prices on trichlorethylene are frt. alld. with the exception of Zone 4, in which case the prices indicated are based on f.o.b. L. A., Cal.; S. F., Cal.; Portland, Ore., and Seattle, Wash. Zone 1 includes the following States:—Conn., Md., N. Y., Va., Ky., Me., N. J., Vt., W. Va., Mo., Tenn., Ind., Ia., Pa., R. I., Ill., Mich., Minn., Wis., Del., Mass., N. C., O., Omaha, Neb.; Kansas City, Kansas. Zone 2 includes Ala., Kan., except Kansas City, N. D., Ga., Neb., except Omaha; S. D., Miss., Ark., S. C., La., Okla. and Fla. Zone 3 includes Colo., N. M., Wyo., Texas and Eastern Montana. Zone 4 includes Arizona, Western Montana, Ida., Ore., Nev., Wash., Utah and Cal.

Tricresylphosphate,[3,4] CP, cns., works..lb. .43½- .54½
dms., c.l., divd.....lb. .37½- —
smaller lots, works.....lb. .40½- —
tech., cns., works.....lb. .23½- .45½
dms., c.l., divd.....lb. .25 - .31
smaller lots, works.....lb. .25½- .31½
Triethanolamine, dms., c.l., works, lb. .19 - —
l.c.l., works.....lb. .20 - —
tanks, works.....lb. .18 - —
Triethylamine, dms., l.c.l., works, lb. 1.16 - —
Triethyleneglycol,[8] dms., l.c.l..lb. .26 - —
Triethyl citrate, ton lots, 560-lb. dms..lb. .24 - —
single dms.....lb. .26 - —
Triethyl phosphate, cns.....lb. .46 - —
Trimethylamine, dms., c.l., divd., lb. .85 - —
l.c.l., divd.....lb. .90 - —
Triphenyl phosphate,[3] bbls....lb. .31 - .32
Tripoli, air-floated, bgs., c.l., works..ton.21.50 - —
double grd., bgs., c.l., works, ton.17.50 - —
once-grd., bgs., c.l., wks..ton.16.00 - —
Trisodium phosphate (see Soda phosphate, tribasic).
Tuba root (see Derris root).
Tungsten metal powd.,[3,8] 99-99.7%, dms., works..lb. 2.60 - 5.40
Oxide, CP, kgs.....lb. No prices
Chem. grade, kgs.....lb. No prices
Turmeric root, Alleppey, bgs..lb. .09½- .10
Madras, bgs. .....lb. .10 - .10½
Turpentine, spirits, gum, bbls., c.l., ex dock..gal. .78¼- —
l.c.l., 10 ex dock..gal. .80¼- —
5 ex dock.....gal. .82¼- —
wood, dest., dist., dms., divd., E. cities..gal. .55 - .58
tanks .....gal. .50 - —
Turpentine, steam-dist., dms., c.l., divd..gal. .64 - —
l.c.l., divd.....lb. .67 - —
tanks, divd.....gal. .59 - —

U

Unicorn root, false (see Helonias root).
True (see Aletris root).
Uranium oxide, black, bgs.....lb. 2.55 - —
Urea, dom., 46%, N., bgs., 20 tons, f.o.b. Belle, W.Va., Metropolitan New York, Phila., Wilmington, Del., Baltimore, Wilmington, N. C., Charleston, Savannah, Jacksonville....ton.80.00 - —
l.c.l., f.o.b. Belle, W. Va. ton.82.50 - —
5-19 tons, f.o.b. Boston, New York, Philadelphia, Wilmington, Del., Baltimore..ton.85.00 - —
less than 5 tons, f.o.b. New York, Phila..ton.90.00 - —
import, 40% N., bgs., 5 tons, f.o.b. Atl. Gulf ports or Belle, W. Va., ship.....ton. No prices
smaller lots, f.o.b. N. Y. whse..ton. No prices
pure, cs.....lb. .12 - —
fertilizer compound, basis 42% N., bulk, c.l., f.o.b. Belle, W. V., or Atl., Gulf ports. ports..ton.57.40 - —
Urea-ammonia liquor, basis 45% N., tanks, f.o.b. Belle, W.Va., or Alt., Gulf ports..ton.121.58 - —
37% N. (insoluble), f.o.b. Belle, W. Va., or Atl., Gulf ports, ton.127.00 - —
Uva ursi leaves, bls.....lb. .25 - .27

V

Valerian root, Belgian, bls. ....lb. 1.45 - 1.50
Eastern, bls.....lb. 1.05 - 1.10
Valonia, beards, bgs., f.a.s...ton. No prices
cups, bgs., f.a.s.....ton. No prices
Vanadium pentoxide, CP, bgs., cns., works..lb. 7.00 - —
tech., dms., works.....lb. 1.10 - —
Vanilla beans,[1] Bourbon, tins..lb.10.00 - —
Java, tins.....lb. 9.50 - —
Mexican, whole, tins.....lb.11.00 - —
cuts, tins.....lb.10.00 - —
Tahiti, white label, tins....lb. 6.00 - —
yellow label, tins.....lb. 5.75 - —
West Indian, tins.....lb.10.00 - —
Vanillin, ex eugenol, 25-lb. tins, lb. 2.60 - —
5-lb. tins.....lb. 2.65 - —
1-lb. tins.....lb. 2.75 - —
ex-guaicol, 25-lb. tins.....lb. 2.35 - —
5-lb. tins.....lb. 2.40 - —
1-lb. tins.....lb. 2.50 - —
ex lignin, any quantity, 25-lb. tins..lb. 2.35 - —
5-lb. tins.....lb. 2.40 - —
1-lb. tins.....lb. 2.60 - —
Venice turpentine, true, cs.....lb. No prices
artificial, cs.....lb. .24 - .25
Verdigris, bbls., kgs.....lb. .22 - .23
Vinyl acetate, cns., works.....lb. .25 - —
dms., c.l., 30,000 lbs. gross, works..lb. .15 - —
l.c.l., works.....lb. .16 - —
5 gals., dms., works.....lb. .25 - —
Ether, 75 c.c. .....bot. 1.30 - —
50 c.c.....bot. .73½- —
25 c.c.....bot. .45½- —
Vitamin B_1 (see Thiamine hydrochloride).
B_2 (see Riboflavin).
B complex (see Rice bran).
C (see Acid, ascorbic).
D (see Oils, codliver, halibut liver).
E (see Alpha Tocopherol).
G (see Riboflavin).
P-P (see Acid, nicotinic; acid, nicotinic amide).
Violet, methyl, toner (see M).
V.M.P. naphtha (see petroleum, naphtha, v.m.p.).

W

Wahoo bark, bls.....lb. .43 - .49
tree .....lb. .28 - .29
Wattle bark, bgs., f.a.s.....ton.41.00 -43.00
Extract, solid, bgs.....lb. .04475-.0460
liquid, tanks.....lb. .05 - —
bbls. .....lb. .05¾- —
Wax, amorphous, Group 3, at refineries; 160-165, amber..lb. .15½- —
black .....lb. .14 - —
white .....lb. .26 - —

Caustic Soda keeps 'em flying!

Solvay Caustic Soda keeps 'em flying and rolling... by keeping the wheels of industry humming... for it is down deep in industry, before materials become machines... when rayon is still a liquid, when gasoline is coming from the crude, *that caustic soda is essential!*

SOLVAY SALES CORPORATION *Alkalies and Chemical Products Manufactured by The Solvay Process Company*

Wax, amorphous, 180-185, amber, lb. .17½- —
black .....lb. .16 - —
white .....lb. .29 - —
Bayberry, bgs.....lb. .18 - .20
Bees,[2] white, bleach, slabs..lb. .61 - —
cakes, cs.....lb. .62 - —
discs, cs.....lb. .63 - —
yellow, crude, African.....lb. .49 - —
Brazilian, Chilean, bgs..lb. .50 - —
refd., slabs, cs., lbs.....lb. .59 - .60
Candelilla,[3] bgs., 1 ton.....lb. .38 - —
Carnauba,[3] No. 3 chalky, bgs. lb. .77 - .78
No. 2, N.C., bgs.....lb. .84 - .85
N.C., 3, bgs.....lb. .78 - .79
refined, bgs.....lb. .85 - .86
yellow, No. 1, bgs.....lb. .88 - .89
No. 2, bgs.....lb. .87 - .88
Ceresin, dom., 138°-140° m.p., bgs., 1 ton..lb. .13½- .14
jobbing lots.....lb. .14½- .15
150°-160° m.p., bgs., 1 ton..lb. .15½- .16
jobbing lots.....lb. .16½- .17
160°-170° m.p., bgs., 1 ton..lb. .16½- .17
jobbing lots.....lb. .17½- .18
Japan, cs.....lb. .40 - .45
Montan, bgs.....lb. .45 - .46
Ouricury,[3] bgs.....lb. .55 - .62
Ozokerite, import, hard, green, congeal, p. 66°-68° C., bgs. lb. No stocks
70°-72° C., bgs.....lb. No stocks
74°-76° C., bgs.....lb. No stocks
snow-white, pure, 76°-78° C., bgs..lb. No stocks
yellow, natural, 76°-78° C., bgs..lb. No stocks

Wax, paraffin (see P).
spermaceti, blocks, cs.....lb. .26 - .27
cakes, cs.....lb. .27 - .28
White lead (see Lead, white).
White pine bark, rossed, bls..lb. .08 - .09
White precipitate,[2] powd., dms., 50 lbs. or more..lb. 2.84 - —
Whiting, chalk, dry-grd., c.l.ton.18.00 -22.00
l.c.l. .....ton.20.00 -24.00
wet-grd., c.l.....ton.21.00 -25.00
gilders, bolted, c.l.....ton.20.00 -24.00
l.c.l. .....ton.21.00 -24.00
extra bolted, c.l.....ton.22.00 -26.00
l.c.l. .....ton.23.00 -27.00
Paris white, c.l.....ton.24.00 -28.00
l.c.l. .....ton.25.00 -29.00
Limestone, airfloated, 99⅘%, 250 mesh, c.l..ton. 9.35 -10.10
200 mesh, c.l.....ton. 8.60 - 9.50
90%, 200 mesh, c.l.....ton. 6.25 - 7.00
gilders', c.l.....ton.11.50 -13.00
l.c.l. .....ton.12.50 -16.00
water-floated, gilders' putty grade, c.l..ton.12.00 -13.00
l.c.l. .....ton.13.00 -16.00
precipitated, c.l.....ton.14.00 -15.00
l.c.l. .....ton.18.00 -25.00
dry ground, 325 mesh, 30 tons, f.o.b. plants..ton. 6.00 - —
l.c.l., up to 5 tons.....ton. 7.00 - —
less than 5 tons.....ton. 9.00 - —
Wild cherry bark, thick, natural, bls..lb. .05½- .06
rossed, bls.....lb. .15 - .18
thin, natural, bls.....lb. .09½- .10
rossed, green, bls.....lb. .12 - .15
Wild indigo root, bls.....lb. .22 - .26
Witch-hazel extract, dist., NF, bbls..gal. .72 - .75
leaves, bls.....lb. .07 - .09
Witherite (see Barium carbonate, natural).
Woodflour, dom., 40 mesh, c.l., f.o.b. North Tonawanda, N.Y., ton.20.00 - —
60 mesh, same basis....ton.24.00 - —
80 mesh, same basis....ton.27.00 - —
100 mesh, same basis...ton.30.00 -32.00
Bags, extra, 25c. each; must be returned for credit. Carload freight to New York, N. Y., 29c. per 100 lbs.
Import, 70 mesh, bgs., ex dock, ton. No prices
80 mesh, bgs., ex dock...ton. No prices
100 mesh, bgs., ex dock...ton. No prices
120 mesh, bgs., ex dock...ton. No prices
Wormseed, American, bgs.....lb. .08 - .09
Levant, bgs.....lb. No prices
Wormwood, bls.....lb. .50 - .60

X

Xylol,[2,3,6] (xylene), indus., dms., returnable, works..gal. .32 - —
tanks, E. of Omaha, frt. alld., gal. .27 - —
tanks, W. of Coast, f.o.b. Minnequa, Colo..gal. .27 - —
10°, dms., returnable, works gal. .37 - —
Xylol, 10°, tanks, E. of Omaha, frt. alld..gal. .30 - —
5°, dms., returnable, works.gal. .42 - —
tanks, E. of Omaha, frt. alld., gal. .37 - —
8°, dms., returnable, works.gal. .47 - —
tanks, E. of Omaha, frt. alld., gal. .42 - —
Xylidin, mixed, dms.....lb. .35 - .36

Y

Yara yara, cryst., cns.....lb. 1.80 - 1.85
Yellow, arsenic[2] sulphide, dom., bbls., f.o.b. New York..lb. .52 - .55
bottles, same basis.....lb. .60 - .64
imp., bbls., same basis.....lb. .20 Nom.
Benzidine, bbls., dlvd.....lb. 1.35 - 2.25
Cadmium, CP, import, bxs..lb. 1.35 - 1.40
lithopone, primrose, lemon, golden and standard orange, ton lots, bbls.....lb. .55 - —
400-2,000 lbs., bbls., lb. .60 - —
100-300 lbs., pkgs..lb. .65 - —
Yellow cadmium lithopone prices are f.o.b. Balto. or whse. points, transportation prepaid or allowed E. of Rockies.
sulphide, orange kegs or cases, works..lb. 1.10 Nom.
Chrome, CP, bbls., dlvd. No. of Tenn. and N. C., E. of Miss. R., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul, contracts..lb. .16 - —
Chrome yellow, CP, prices are ¼c. higher, dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c.), Miss., N. C., S. C., Tenn., Tex. (Dallas, 1¼c.; Ft. Worth, 1¼c.; El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Dutch, pink, bbls.....lb. .09 - .11
Hansa bbls., same basis chrome, lb. 1.37 - —
primrose shade, bbls., same basis chrome..lb. 1.75 - —
Mercury oxide, tech., bbls., 1,000 lbs..lb. 2.37 - —
smaller lots.....lb. 2.39 - —
Ocher, American, golden, bbls., works..lb. .04½- .06¼
yellow, bbls., works....lb. .02 - .02½
French type, bbls., c.l....lb. .0345- —
l.c.l. .....lb. .0365- —
Oxide, nat., bbls., c.l., f.o.b. Bethlehem, Easton..lb. .04½- —
l.c.l., same basis.....lb. .05 - —
synth., bbls., c.l., works...lb. .07 - —
l.c.l., same basis.....lb. .071 - —
Persian orange (see O).
Zinc, bbls., same basis, chrome CP, contracts..lb. .15 - —
open order.....lb. .15 - —
Navy specifications type, contracts..lb. .15 - —
open order.....lb. .15 - —
Yellow dock root, dom., bls...lb. .16 - .23
Yellow root (xanthorisa), bls...lb. .11 - .13
Yerba santa leaves, bls.....lb. .15 - .16
Yohimbine hydrochloride, vls..oz. 3.00 - 5.75

Z

Zein, bgs., 1,000 lbs. or more, works..lb. .25 - —
less than 1,000 lbs., works..lb. .30 - —
Zinc,[1,2,6] Metal (see Paint market).
acetate, tech., bbls., dlvd....lb. .16 - .17
USP, bbls., 250 lbs.....lb. .27 - —
kgs., 100 lbs.....lb. .29 - —
E. of Rockies..lb. .12 - —
l.c.l. .....lb. .12½- —
Zinc arsenite prices are on a frt. alld. basis to dest., in lots of 96 lbs. or over.
Carbonate, tech., bbls.....lb. .14 - .20
USP, precip., powd., bbls..lb. .32½- —
25-lb. dms.....lb. .37½- —
kgs. .....lb. .34½- —
Chloride, tech., fused, dom., c.l., works..100 lbs. 5.00 - —
l.c.l., works.....100 lbs. 5.35 - —
gran., dms., c.l., works.... 100 lbs. 5.75 - —
l.c.l., works.....100 lbs. 6.50 - —
USP, 100-lb. dms.....lb. .30 - .31
25-lb. jars.....lb. .36 - —
solut., 50%, dms., c.l., works. lb. .0315- —
l.c.l., works.....lb. .04¼- .04½
tanks, works.....lb. .0250- —
Chromate (see Yellow Zinc Chromate).
Cyanide, kgs., works.....lb. .33 - .37
Dust, bbls., c.l., dlvd.....lb. .1035- —
l.c.l., f.o.b. works.....lb. .1135- —
Fluoride, bbls.....lb. .25 - .30
Iodide, NF, bots.....lb. 4.54 - —
jars .....lb. 4.40 - —
Metal (see daily quotations in Market report).
Oxide,[2] pigment, dom., acidular type, bgs., cl., dlvd.lb. .07¼- —
l.c.l., dlvd.....lb. .07½- —
bbls., c.l., dlvd.....lb. .07½- —
l.c.l., dlvd.....lb. .07¾- —
American process, lead-free, bgs., c.l., dlvd.....lb. .07¼- —
l.c.l., dlvd.....lb. .07½- —
bbls., c.l., dlvd.....lb. .07½- —
l.c.l., dlvd.....lb. .07¾- —
leaded, 5%, bgs., c.l., dlvd..lb. .07 - —
l.c.l., dlvd.....lb. .07⅞- —
bbls., c.l., dlvd.....lb. .07⅞- —
l.c.l., dlvd.....lb. .07⅞- —
35% or more, bgs., c.l., dlvd..lb. .07 - —
l.c.l., dlvd.....lb. .07¼- —
bbls., c.l., dlvd.....lb. .07¼- —
l.c.l., dlvd.....lb. .07½- —
Prices on West Coast ½c. per lb. higher.
French process, com'l, lead free, bgs., c.l., dlvd..lb. .07¼- —
l.c.l., dlvd.....lb. .07½- —
bbls., c.l., dlvd.....lb. .07½- —
l.c.l., dlvd.....lb. .07¾- —
green seal, bgs., c.l., dlvd., lb. .09 - —
l.c.l., dlvd.....lb. .09¼- —
bbls., c.l., dlvd.....lb. .09¼- —
l.c.l., dlvd.....lb. .09½- —
red seal, bgs., c.l., dlvd. lb. .08½- —
l.c.l., dlvd.....lb. .08¾- —
bbls., c.l., dlvd.....lb. .08¾- —
l.c.l., dlvd.....lb. .09 - —

Why did the best castles have round corners? (PACKAGING RIDDLE)

THERE was one big trouble with castles. The first ones were often square-cornered. They were supposed to protect what was inside. But they didn't. They couldn't.

No matter how many loopholes they had, there were always "blind" corners to block vision. Hostile troops could creep up unseen. Further, the stones at the corner were exposed on two sides. And that made them more vulnerable to battering rams.

Square-cornered castles just weren't safe enough! The package *had* to be improved.

New castles were built with round corners. In these circular walls, the loopholes let you see out at *every* angle. And in addition, the curved surface presented a greater obstacle to battering rams.

History books don't refer to the castle builders as "packaging experts." But they actually were. They improved their package to fit their needs.

Producing the right packages to fill America's needs today is the most important job Continental ever tackled. What these packages are, their size, or appearance is unimportant now. The significant thing is that government, like industry, has found that the tin container is an all-around, safe, economical package.

Looking into the future we see many new packages—ideas which must be held until another day. But, for those who are planning ahead, we offer the services of our packaging engineers, research men and designers. They will be glad to work with you.

CONTINENTAL CAN COMPANY

Packaging Headquarters for Industry

What will be the PACKAGE of the FUTURE?

The package of the future will be the package that best meets *all* these 10 important points:

1. Protects against light, heat, and dirt.
2. Does not chip, break, or tear.
3. Is adaptable to *highest* speed filling operations.
4. Is economical to pack, ship, and handle.
5. Light weight, compact, no waste space.
6. Moisture and vapor proof, impervious to temperature changes.
7. Easy and convenient to display, sell.
8. Available in wide variety of sizes, shapes, styles (over 500).
9. Offers maximum convenience and safety in consumer usage.
10. Permits high processing temperatures, certain hermetic sealing.

These points made the metal container *first* in packaging. If there ever is another package that has *all* these qualifications, we'll be making it!

Zinc, oxide, French process, white seal, bgs., c.l., dlvd.	lb.	.09½- —
l.c.l., dlvd.	lb.	.09¾- —
bbls., c.l., dlvd.	lb.	.09¾- —
l.c.l., dlvd.	lb.	.10 - —
imported, gold seal, cks., ex whse.	lb.	No prices
green seal, bbls., ex whse.	lb.	No prices
white seal, cks., ex whse.	lb.	No prices
USP, c.l., 50-lb. bgs.	lb.	.10½- —

Zinc oxide prices in l.c.l. are ¼c. higher.

Lead-free add 5% and 35% leaded zinc oxide in car lots are ½c. per lb. higher delivered Pac. Cst., and in less car lots are ½c. per lb. higher ex whse. Pac. Cst.; 50% leaded is 5.6c. per lb. higher for car lots delivered Pac. Cst.

Palmitate, bbls.	lb.	.32 - .33
Resinate, fused, pale, bbls.	lb.	.11 - .12
precip., dms., dlvd.	lb.	.15 - —
Silicofluoride, bbls.	lb.	.15 - .18
Stearate, tech., precip., or USP, ton lots.	lb.	.30 - —
less than ton lots.	lb.	.31 - .32
Sulphate, cryst., bgs., c.l.	100 lbs.	3.60 - —
l.c.l.	100 lbs.	4.35 - —
bbls., c.l.	100 lbs.	3.85 - —
l.c.l.	100 lbs.	4.60 - —
flake, bgs., c.l.	100 lbs.	4.10 - —
l.c.l.	100 lbs.	4.85 - —
bbls., c.l.	100 lbs.	4.35 - —
l.c.l.	100 lbs.	4.80 - —
powd., bgs., c.l.	100 lbs.	5.80 - —
l.c.l.	100 lbs.	6.55 - —
bbls., c.l.	100 lbs.	6.05 - —
l.c.l.	100 lbs.	6.80 - —
Sulphide,[1] pure, bgs., c.l. (20 tons), dlvd.	lb.	.08¼- —
l.c.l., dlvd.	lb.	.08½- —
bbls., c.l. (20 tons), dlvd.	lb.	.08½- —
l.c.l.	lb.	.08¾- —
barium, pigment, bgs., c.l., dlvd.	lb.	.0560- —
l.c.l., dlvd.	lb.	.0585- —
calcium pigment, bgs., c.l., dlvd.	lb.	.0560- —
l.c.l., dlvd.	lb.	.0585- —
magnesium, pigment, bgs., c.l., dlvd.	lb.	.05¾- —
l.c.l., dlvd.	lb.	.06 - —

Zinc sulphide delivered to Pac. Cst. is ¼c. per lb. higher for the pure and ½c. for the others.

Sulphocarbolate, NF, bbls., dms.	lb.	.24 - .25
Zinc-ammonia chloride, dms., c.l., works.	100 lbs.	5.65 - —
l.c.l., works.	100 lbs.	6.70 - —
Zinc-iron oxide, pigment, bgs., c.l., dlvd.	lb.	.06 - —
l.c.l., dlvd., E. of Rockies.	lb.	.06¼- —
dlvd., Pac. cst.	lb.	.06¼- —
ex whse., Pac. cst.	lb.	.07 - —
Zirconium nitrate, kgs., works.	lb.	3.00 - 4.00
Oxide, crude, 70-75%, gr., bbls., works.	ton	75.00 -100.00
white, 98%, grd., kgs., works.	lb.	1.80 - 2.00

Synthetic Resins

The customary monthly listing of prices for synthetic resins and other branded paint materials will appear next in the October 26 issue of OPD.

Revenue Returns Show Gain in September

OPD Washington Bureau

Collection of excise taxes by the Bureau of Internal Revenue, Washington, for September, 1942, compared with September, 1941, as follows:—

Taxes Collected

	September 1942	September 1941
Coconut, etc., oils, processed	$432,666.32	$2,299,445.22
Distilled spirits, domestic, excise tax $4 per gallon	3,982,117.56	4,579,756.15
Distilled spirits, imported, excise tax $4 per gallon	62,598,973.30	45,961,942.97
Gasoline	1,046,175.84	1,084,838.55
Lubricating oils	2,933,417.11	3,576,516.35
Narcotics, including special taxes	23,191.27	16,243.93
Oleomargarin excise taxes	.....	.....
Oleomargarin special taxes	117,879.53	123,818 .02
Total internal revenue	$2,460,174,573.34	$1,053,458,231.04

Quantities Taxed

	September 1942	September 1941
Distilled spirits, domestic, tax gallons	15,643,890	15,338,174
Distilled spirits, imported, tax gallons	995,529	1,530,774
Distilled spirits, rectified, proof gallons	6,312,530	5,241,067
Oleomargarin, colored, pounds	95,543	54,082
Oleomargarin, uncolored	32,008,100	34,291,000

— OPD : 72d Year —

Thermosetting Plastics Processors Group Formed

OPD Washington Bureau

An advisory committee for thermosetting plastics processors has been appointed by the War Production Board. Frank H. Carman, chief of the plastics and synthetic rubber section of the Chemicals Branch, was named government presiding officers. Committee members are:—

Donald H. Dew, Diemolding Corporation, Canastota, N. Y.; George K. Scribner, Boonton Molding Company, Boonton, N. J.; William H. Milton, jr., General Electrical Company, Pittsfield, Mass.; Thomas J. McIntyre, Macklin Company, Jackson, Mich.; Milton P. Higgins, Norton Co., Worcester, Mass.; W. A. Blume, American Brake Shoe & Foundry Company, Detroit, Mich.; Dr. R. T. Halstead, Johns-Manville, New York; D. J. O'Connor, Formica Insulation Company, Cincinnati, Ohio; Dr. G. E. Landt, Continental-Diamond Fibre Company, Newark, Del.; M. A. Chapman, Mica Insulator Company, New York; John T. Ehleider, Insulating Tube Company; Poughkeepsie, N. Y.; Leonard T. McCloskey, Taylor Fibre Company, Norristown, Pa.

— OPD : 72d Year —

Soda Glutamate Price Set

OPD Washington Bureau

The maximum prices for the sale of monosodium glutamate by the A. S. Staley Manufacturing Company, Decatur, Ill., has been established by the Office of Price Administration at the following levels:—

Less than 100 pounds, per lb. (f.o.b.)	$1.05
100-499 pounds, del.	1.04
500-999 pounds, del.	1.03
1,000 or more pounds, del.	1.02

Manganese Ore Sales Ceiled by OPA

—*Continued from page 5*

maximum price for a particular sale of metallurgical ore shall be the buyer's most favorable basing point.

(2) For battery and chemical manganese ores, other than domestic battery and chemical ores, maximum prices shall be:—

(a) The highest price which the seller charged for the same kind or grade of ore delivered by him to a purchaser of the same class during March 1942; or

(b) If the seller did not deliver such kind or grade during March 1942, the maximum price shall be the highest price quoted in the seller's price list, or, if he had no price list, the highest price which the seller regularly quoted in any other manner, for delivery of such kind and grade of ore to a purchaser of the same class during March 1942; or

(c) If the maximum price for the kind or grade of ore cannot be determined under the foregoing provisions, the maximum price shall be a price approved by OPA.

In the case of battery and chemical manganese ores imported since March 31, provision is made for adjustments in price to compensate for increased importing expenses.

Exempted from the regulation's pricing provisions are the following:—

Sales of domestic battery or chemical manganese ores; sales or deliveries of manganese ores to the United States; of its agencies, including the Metals Reserve Company; sales ore deliveries of manganese ores which are located outside the continental United States.

This means that the regulation's pricing provisions do not apply where ore is bought f.o.b. a foreign mine or port. However, OPA will grant no relief on end-product prices by reason of ore costs resulting from such foreign purchases, which are in excess of the delivered cost for a domestic purchase.

— OPD : 72d Year —

Ahlborn Honored

Oscar Ahlborn, chief chemist for the Twin City Shellac Company, Brooklyn, was honored recently by the company upon completion of twenty years of service.

8 reasons why most interior water-thinned paints contain zinc sulfide pigments

1 EASY MIXING . . . No difficulty in manufacturing. Zinc sulfide pigments incorporate easily. No prolonged mixing or grinding. Smoother paints—fewer agglomerates.

2 HIGH HIDING . . . The nature of the vehicle in paints of this type enhances the hiding value of zinc sulfide pigments.

3 UNIFORMITY . . . Uniform plant batches of paint obtained with uniform New Jersey Zinc pigments.

4 GOOD PACKAGING . . . With a properly formulated emulsion, zinc sulfide pigments are stable in the package and stand alternate heating and freezing.

5 SERVICEABLE FILMS . . . Zinc sulfide pigments do not hinder the binder from coalescing to form well-knit films. Makes for good washability.

6 GOOD COLOR . . . Zinc sulfide pigments produce whites which compare favorably with other paints in your line. An excellent base for clear, bright tints.

7 EASE OF APPLICATION . . . Paints made with zinc sulfide pigments stay with the brush and work easily.

8 LOW COST . . . All the above factors, plus high value per dollar of pigment involved, give economical paint for manufacturer and user.

Our Technical Service Division will be glad to discuss formulations and to send samples of pigments upon request.

ALBALITH
332,335,392,836
(Lithopones)

CRYPTONE ZS-830
(Technically Pure Zinc Sulfide)

THE NEW JERSEY ZINC COMPANY
160 FRONT STREET — New Jersey Zinc — NEW YORK, N.Y.

"And Freedom's banner streaming o'er us"

Oil, Paint and Drug Reporter

Founded October 18, 1871, by William O. Allison.

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Tailormade Paint Oils

That contributor is economically wise who in last week's absentee convention of the paint industry advanced and somewhat developed the idea that oils for paintmaking and varnishmaking and for all the many other industrial processing in which they are an essential, if not the most essential, material should be made to order, each tailored to fit a particular processing operation directed to a particular end result. His point that wasteful application of many, if not most, of the constituents of an oil just because they are naturally combined is a challenge to the paint industry and its oil-producing ally.

That challenging idea is not something dim in the farther regions of theory. Its realization is a commercial actuality today. Separation, regrouping, and re-esterfication of the fatty acids of an oil have been successfully applied to solution in part of the cutting off of some and the serious curtailment of other foreign-source oils heretofore regarded as a *sine qua non* in the making of paints and varnishes. Relatively simpler processing also has been applied with a substantial measure of physical and chemical exactness to the adaptation of low-drying and even nondrying oils to the needs of such manufacturing. There is an expansive territory to be developed beyond the frontiers already crossed.

It is the characteristic properties of its fatty acids which fit an oil best to be a soapstock, a food, a paint vehicle, or a varnish vehicle, the difference being substantial even between the last-named two. It is scientifically wasteful to use a conjugated double-bond fatty acid as a soapstock; it is technically bad practice to send oleic or particularly lathery lauric acid through the varnish kettle. No one property determines the best utilization of an oil: the iodine number alone is not a final criterion of drying qualities.

In almost all industrial applications no natural oil is so good for any purpose as a reformed oil could be. There is a great usefulness unbalance of the supply of industrial oils. The resultant conclusion is that large portions of the supplies of all oils should be pooled; the oils mixed; their acids extracted and separated; then regrouped to meet special needs; and finally such as are improved thereby—study might substantially lessen their number—should be re-esterified with glycerin or some other polyhydric alcohol—tailored to the various needs of all industry.

— OPD : 72d Year —

Talk Tax with Them

Congressmen will be home all over the country this week. Reports of their puzzlement in the matter intimate that they will welcome suggestions for a 1943 edition of the tax law. They should be given plenty anyhow.

The recently issued 1942 edition follows the old and somewhat obsolete pattern. Those engaged in the revisions it represents were not inclined to pioneer in spite of much talk about sales taxes and spending taxes — both of which would continue existing inequities and aggravate some.

It is time that social reforms be dropped from their role of tax vehicles. It is time that congressmen were plainly told that there should be but one Federal tax—a graduated levy on all gross incomes, collected at the source, on a pay-as-you-go basis.

— OPD : 72d Year —

There's Another Candle

OIL, PAINT AND DRUG REPORTER has recently entered upon its seventy-second year of continuous market-reporting service to converting, compounding, and processing consumers of chemicals, oils, and drugs. It is proud of its record of years; prouder still of the recognition as authoritative and reliable which most generously has been extended to it by the multitude of industries to the service of which its efforts are directed.

In the perspicacity that was his outstanding characteristic, the founder of OIL, PAINT AND DRUG REPORTER foresaw the intimacy and complexity, if not the eventual extensiveness, of the interrelations of chemicals, oils, and drugs as materials of industrial processes. In the leading editorial-page article—"A Few Words to Our Patrons"—in the first number of this periodical, October 18, 1871, he said:—

> It was our first purpose to confine our attention chiefly to oils, but their intimate, indeed, almost inseparable connection with drugs, paints and chemicals has decided us to make our paper a complete weekly record of these associate branches of trade.

Over the now more than seventy-one years of its existence that decision has constantly stated the purpose of OIL, PAINT AND DRUG REPORTER. The "intimate" and quite "inseparable" relationships of what are popularly known as chemicals, oils, and drugs—all, of course, are chemical compounds — in industrial applications have increased as their number and variety and usefulness have grown in response to the practically boundless application of chemistry to manufacturing industry. That is why OIL PAINT AND DRUG REPORTER sticks to its original decision to be, not "strictly—[better said: solely] a paint paper," or "drug paper," or "oil paper," or any other narrowedly specializing paper, but "a complete weekly record of these associate branches of trade."

To our patrons—in spite of semantic wanderings of later days, that is still the right word—we pledge continued full devotion to the service of those who need and use chemicals, oils, and drugs—in paint, paper, plastics, or whatever.

— OPD : 72d Year —

OPA and the Farm Bloc

The congressional farm bloc admits and even brags that it is "out to get" the administrator of the Federal price-control law. Its latest excuse for trying to get rid of an official who is trying to the full extent of a still inadequate law to protect the public against price-gougers is that he is flouting the law's final try at the farm profiteer by counting in the governmental handouts to the latter when calculating the parity price of farm products. The law has been interpreted by the Attorney-General in support of the position of the OPA chief. But, it has become the customary thing for the farm bloc to do its own law interpreting and to threaten with all the power of its control of votes to "get" the man who dares to say it "Nay!"

It is unfortunate that the President has not declared that he stands behind his Attorney-General and his administrator of price-control against all blocs.

Some of the bleating so frequent on the part of that special extragovernmental farm bloc, the embuttered farmers of the dairy industry, now has to do with how freezing farm labor in its jobs at fixed pay will do more harm than good under the food problem of the nation. In this bleating is an on-the-face antagonism to subsidies to bolster farm prices—the real objection is that the subsidy method puts a ceiling on profiteering. And the bleaters go on to show how many farmers are "out of business"—but do not say why they don't go to work. There is still talk about "the same consideration as labor receives," with no mention of the fact that "labor" has to pay for food and shelter. There is no admitting that the farmer is away ahead of all other producers in price hoisting over the past year and could pay his help more without milking the consumer or sucking the government if he would only join honestly with others in search of an economical method of distributing his goods.

See how "badly off" is the "poor farmer" in the following price comparison:—

Prices today—	Compared with (as 100) 1926-36 average	October 1941
Building materials	170.1	115.1
Chemicals, oils, drugs	138.5	103.8
Farm products	160.1	125.0
Foods	149.0	117.1
Fuels	134.0	106.2

If any member of the congressional farm bloc or any logrolling "pal" of it who is up for re-election is voted back into office tomorrow, his constituents will deserve all the price-gouging which they thus endorse.

RESEARCH

EVEN Pollyanna might have difficulty in finding a ray of sunshine in the situation in which many manufacturers have been placed because of present shortages of many materials. Nevertheless the resulting frenzied search for substitutes has often uncovered a hitherto overlooked product which has proven satisfactory or even superior to that formerly used.

Unfortunately, however, it has quite often been found that a new discovery is available in only limited amounts since the producer had not previously received sufficient encouragement to warrant installation of the equipment necessary for large-scale production. Even in such cases the research has not been in vain since with the return of normal conditions the producer will be able to supply the product in adequate amounts, the value of it having been established, and the user will have been awakened to the necessity of investigating all materials which he might use.

There is often a temptation to consider a particular product of manufacture as being entirely satisfactory as regards both quality and cost and to curtail research involving it. Because of present shortages of raw materials and equipment there is also a temptation to curtail research involving new products or new uses for present products.

Chas. Pfizer & Co., Inc. does not subscribe to such views. We believe that when the job now in hand is successfully completed our nation will find itself with a productive capacity greatly in excess of any that it has previously enjoyed and that now is the time to prepare to utilize this. We are increasing our research program, primarily of course in order to help do our share toward finishing this present job as quickly as possible, but also secondarily that new products and new uses for old products may be available for any surplus productive capacity to come.

FOR VICTORY BUY UNITED STATES WAR BONDS AND STAMPS

PFIZER QUALITY

MANUFACTURING CHEMISTS · ESTABLISHED 1849

CHAS. PFIZER & CO., INC.

81 MAIDEN LANE, NEW YORK · 444 W. GRAND AVE., CHICAGO, ILL.

We can offer on contract for

1943

a number of interesting items

May we submit our list?

WILLIAM D. NEUBERG COMPANY

Chemicals

GRAYBAR BUILDING • 420 LEXINGTON AVE • NEW YORK, N. Y. • TELEPHONE LEXINGTON 2-3324

HENRY SUNDHEIMER, INC.

SODIUM SILICO FLUORIDE

AMMONIUM SILICO FLUORIDE

MAGNESIUM SILICO FLUORIDE

ZINC SILICO FLUORIDE

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MURRAY HILL 5-4214-5

Make note of this!

STAUFFER CAUSTIC SODA

Liquid
Flake
Solid

Make a note in your "Where to Buy" file that Stauffer is one of the largest producers of Caustic Soda in the country. Stauffer Caustic Soda can be supplied in liquid form in tank cars, solid form in 700 pound drums, and flake in 400 pound drums.

STAUFFER CHEMICAL CO.

420 Lexington Ave., New York, N.Y. 624 California St., San Francisco, Cal.
230 N. Michigan Ave., Chicago, Ill. 555 S. Flower Street, Los Angeles, Cal.

Heavy Chemicals

New ODT Order Attracts Much Interest in Heavy Chemicals Market —Contracts for 1943 Being Written on Many Items at Quotations Unchanged from Current Levels

Discussion in the market for heavy chemicals centered last week around the revised general order 18 of the Office of Defense Transportation, which became effective November 1. Under the terms of the order as revised, railroads are prohibited from accepting for shipment, with certain exceptions, any freight cars not loaded either to full visible capacity or to the marked weight capacity as stenciled on the car or recorded in the Official Railway Equipment Register. As in the original, tankcars, flat cars, and cars containing less-than-carload freight are excluded from the revised order's provisions.

Factors pointed out that only a thirty-day supply of critical materials is allowed but that every effort will have to be made to consolidate shipments under provisions of the new order. It will become increasingly important, they said, that consumers make their purchases from factors in their immediate vicinities. Many of the major producers, of course, have plants or maintain stocks in the more concentrated areas throughout the country.

Although some interests in the market are of the opinion that, with so many restrictions in effect these days, contracts are of questionable advantage, business was being written for next year last week on quite a few items. Among those for which 1943 contracts were being offered by some factors at quotations unchanged from current levels were anhydrous ammonia in cylinders, aqua ammonia in drums, ammonia carbonate, ammonia bicarbonate, sal ammoniac, potash carbonate, caustic potash, soda nitrite, liquid chlorine, soda ash, caustic soda, bleaching powder, and chloropicrin.

With export business in chemicals so crippled these days it is interesting to note that the Office of Price Administration has adopted "as a fundamental policy" the right of exporters to compensation for export functions actually performed.

Among the more outstanding developments in the market over the past week was the announcement by the OPA of a maximum price regulation for manganese ores, designed to stabilize the major cost element for manganese alloys. Known as Maximum Price Regulation No. 248, the order becomes effective November 9.

Paper production, as a percentage of six-day capacity, was 89.9 the week ended October 24, according to the American Paper and Pulp Association. This compares with 89.6 percent in the previous week and 106.4 percent a year ago.

Price Changes

Advanced

None

Reduced

None

Comparative Values

Index numbers compiled from twenty-five typical chemicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
170.2	170.2	170.2	168.3

Index numbers compiled from twenty typical acids on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
116.0	116.0	116.0	109.0

Market news that may have developed after this report was sent to press will be found on page 4.

Alumina Hydrate.—Demand remains at quiet level. Allocations rule. Prices show no change.

Alumina Sulphate. — Inquiry light. No change quotably.

Aluminum.—Under industry control. Paste and seed under allocation. Quotations steady. Transactions in aluminum scrap pursuant to written toll or conversion agreements approved by WPB have been excluded from operation of scrap ceilings by OPA.

Alum, Soda.—No change in market position. Price schedules unaltered.

Ammonia, Anhydrous. — Contracts being written for 1943 by one factor at quotations current for material in cylinders.

Ammonia, Aqua.—Contract quotations on aqua ammonia in drums extended unchanged by one factor for 1943.

Ammonia Bicarbonate. — Quotations unchanged for 1943 by one large interest. Contracts now being written.

Ammonia Carbonate. — Conditions unchanged. Situation similar to that of ammonia carbonate regarding 1943 contracts.

Ammonia Persulphate.—No new developments. Prices steady.

Ammoniac, Sal. — Business being written for 1943 at current quotations by one large factor.

Antimony.—Material continues under industry control with no new features in market. Position unchanged with undertone steady. Factors report inquiry at recent levels. Prices same.

Antimony Needles.—Quiet tone continues to prevail in market. Interests report no price alterations.

Antimony Oxide.—Consumption remains light. Allocations rule. Quotations unaltered.

Antimony Sulphide.—New features lacking. No change quotably.

Arsenic, Red. — See Arsenic Trisulphide.

Arsenic Trisulphide.—Material being used as substitute for red arsenic. No change in quotations.

Arsenic, White. — Revised WPB order controls use of existing inventories as well as end-use on future allocations.

Barium Carbonate.—Market devoid of new developments. Price schedules steady.

Barium Chlorate.—Material under allocation. Factors report no price movements.

Barium Chloride.—Spotty demand. Quotations confirmed.

Bauxite.—Allocations rule. Interest at recent levels. Prices same.

Bleaching Powder.—Allocations govern transactions with heavy demand readily consuming production. Contracts for first quarter 1943 being written at current prices and terms.

Calcium Chloride.—Lower temperatures find factors prepared for good demand for winter uses. Quotations steady.

Carbon Tetrachloride. — Users of carbon tetrachloride for purposes assigned a B-2 rating are now permitted to consume 100 percent of amount used in base period. Price schedules show no change.

Chloropicrin. — Contracts for first quarter 1943 offered at current prices.

Chlorine. — Movement of material into war production channels remains very heavy. Needs of consumers considerably in excess of supplies allocated. Undertone very firm. Business for 1943 on liquid chlorine being written in good volume at current quotations. With 50 percent of the domestic sulphite and sulphate pulp sold in this

Current prices on heavy chemicals are given in the alphabetical list of prices beginning on page 9

BARIUM PEROXIDE
BARIUM AND CHEMICALS, Inc., Willoughby, Ohio
Successors to The J. H. R. Products Co.

FINEST QUALITY
BICARBONATE OF SODA
SAL SODA (Carbonate of Soda Crystals)
MONOHYDRATE OF SODA
CHURCH & DWIGHT CO., Inc.
70 PINE STREET Phone Digby 4-2181 NEW YORK CITY

Faesy & Besthoff
INCORPORATED
22 EAST 40th STREET
NEW YORK CITY
CABLE: TRUFABEST
AN EXPERIENCED ORGANIZATION WITH 25 YEARS' CONTINUOUS SERVICE TO AMERICAN AND FOREIGN BUYERS OF INDUSTRIAL, PHARMACEUTICAL AND AGRICULTURAL CHEMICALS. WE INVITE YOUR INQUIRIES. WRITE OR CABLE.

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PHOSPHORIC ACID
75% PURE FOOD GRADE
An acid made from our own high quality electric furnace phosphorus.
ELEMENTAL YELLOW PHOSPHORUS of very high quality produced by electric furnace reduction of phosphorus rock from our own mines. Shipments in drums, either solid or wedges.
"ELECTROPHOS." A superior quality triple superphosphate of over 48% available P_2O_5.
THE PHOSPHATE MINING CO.
110 WILLIAM STREET, NEW YORK • NICHOLS, FLORIDA

TURNER
chemicals
CAUSTIC SODA
Flake and Solid
LIQUID CAUSTIC SODA
Tank Cars • Tank Wagons • Drums
JOSEPH TURNER & CO.
PROVIDENCE RIDGEFIELD, N. J. CHICAGO

GEORGE F. SMITH

AMMONIA ALUM CRESYLIC ACID

60 East 42nd Street
New York

VAnderbilt
6-3098

POTASSIUM METABISULPHITE
POTASSIUM FERRICYANIDE
(Red Prussiate of Potash)
MANUFACTURED BY
HUNT CHEMICAL WORKS, INC.
271 RUSSELL STREET BROOKLYN, N.Y.

METOL
Sole Licensee Registered Trade Mark
TANNIC ACID, U.S.P. and Technical
GALLIC ACID, U.S.P. and Technical
ZINSSER & CO., Inc., HASTINGS-ON-HUDSON NEW YORK

country produced by West Coast mills, WPB has issued an order banning all shipments to mid-Western and Eastern markets for the next two months.

Cobalt Acetate.—Material in light demand. Allocations rule. Prices show no change.

Cobalt Hydrate.—Material under allocation. No revisions pricewise.

Copper.—Government authorities reported to have started reviewing price control over copper for purpose of obtaining more of the metal for the war effort. Trade informs WPB now releasing full data on November copper allocations to all consumers.

Copper Chemicals.—Allocations rule. Factors report demand for various items unchanged from recent levels. Prices show no alterations.

Copperas. — Light demand. Quotations steady.

Cryolite.—Material under allocation. No change quotably.

Cyanide-Chloride Mixture.—Inquiry at recent quiet levels. Price schedules confirmed.

Ethyl Chloride. — No new developments. No movements pricewise.

Feldspar. — Good movement of material to glass industry, where operations are at high level as result of shortage of tin for containers. Undertone very firm.

Ferric Sulphate.—New features lacking. Prices same.

Glauber's Salt. — No new developments. Material quotably unaltered.

Lead Acetate. — Demand light. Priorities rule. Quotations show no change.

Lime.—No change in tone of market. Factors report no movements pricewise and state none are contemplated.

Lime Sulphur.—New price schedules expected to be issued some time next month.

Magnesia Arsenate.—Under allocation. Prices steady at recent levels.

Magnesite.—No fluctuation in level of demand. Quotations show no change.

Manganese.—A maximum price regulation for manganese ores, designed to stabilize the major cost element for manganese alloys, has been announced by OPA. Maximum Price Regulation No. 248, effective November 9, provides maximum prices for all domestic sales of manganese ores of every kind, other than domestic battery or chemical ores, to any private buyer.

Manganese Acetate. — Material in light demand. No alterations pricewise.

Manganese Arsenate.—Inquiry light. Pricewise, no change. Allocations rule.

Manganese Chloride. — Consumers show only slight interest. No movements pricewise.

Manganese Dioxide. — New features lacking. Quiet undertone. Factors report no price revisions.

Nickel Oxide.—Demand slight. Allocations rule. Quotations steady.

Nickel Salt. — Users' requirements light. Prices show no alterations.

Paris Green.—No change in market tone. Demand remains quiet. Price schedules maintained.

Phosgene.—Demand from war production channels features market. Quotations firm.

Potash Carbonate.—Business for 1943 being written at current quotations.

Potash, Caustic.—Contract quotations extended for 1943 at current levels.

Saltcake. — New features lacking. Prices same.

Saltpeter.—War needs heavy. Light movement to meat packers. No change quotably.

Soda Antimoniate. — Light demand against adequate supplies. Prices show no change.

Soda Ash.—Demand spotty. Quotations maintained by producers and contracts being accepted for 1943 at current prices.

Soda Bisulphate.—No new developments. No movements pricewise.

Soda, Caustic.—Call for material remains spotty. Supplies plentiful. Prices show no change with business

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being written for 1943 at current levels.

Soda Cyanide. — Supplies allocated. No price revisions.

Soda Chlorate.—Allocations rule. No change quotably.

Soda Nitrite.—Business for 1943 bebeing accepted at current quotations.

Soda Silicate. — All's quiet. Prices show no change.

Soda Stannate.—No new features in market. Price schedules confirmed.

Soda Sulphate, Anhydrous. — Little interest. Price movements lacking.

Tin.—Production of tin in the thousand-year-old mines of Cornwall, United Kingdom, reported to be increasing despite labor and machinery shortages, according to Department of Commerce. British Ministry of Supplies and mine owners are endeavoring to increase production to compensate in part for loss of Malayan mines to Japanese.

Tin Oxide.—Prices at which Metals Reserve Company may buy idle or frozen stocks of tin oxide and tin anodes were recently established by OPA.

Trichlorethylene. — Position unaltered. Undertone remains quiet. Prices same.

Uranium Oxide.—Material in light demand. Price schedules steady.

Zinc.—Processing of any zinc metal, dust, scrap or alloy in which percentage of zinc equals or exceeds percentage of all other metals to make hair curlers, hair dryers, lotion dispensers, permanent wave machines, cosmetic containers, compacts and lipstick holders, perfume dispensers, advertising novelties, souvenirs, advertising specialties, billboards, merchandise displays and soap dispensers has been prohibited by WPB since October 1. Processing of zinc to make closures for glass containers has been banned since October 10.

Zinc Carbonate.—Only slight interest. No movements as regards quotations.

Zinc Cyanide.—Demand continues light. Quotations confirmed.

Acids

Demand for chemical acids in general was quiet again last week but war production needs for several items, notably acetic, muriatic, nitric, and sulphuric acids, was quite heavy. The demand for acetic anhydride exceeds current production and this item is now under a system of allocations.

Abietic.—No new features. Factors report no movements pricewise.

Acetic.—War demand good. Supplies remain at satisfactory level. Quotations show no change.

Acetic Anhydride.—Demand exceeds production. Allocations rule. Principal uses are in manufacture of cellulose acetate, pharmaceuticals, vitamins, and explosives.

Battery.—New developments lacking. No change quotably.

Chlorosulphonic.—No change in level of demand or prices.

Chromic.—General limitation order in effect. No change quotably.

Formic.—Little interest in market. No change in prices.

Hydrofluoric. — Tone unaltered. Prices same.

Lactic.—Quiet prevails. Prices confirmed.

Muriatic.—Heavy movement to war production channels. No change in price schedules.

Naphthenic.—Material under allocation. No movements pricewise.

Nitric.—War needs consuming large quantities. Undertone firm.

Sebacic.—No new developments. Price schedules show no revisions.

Sulphuric.—Needs for war purposes extensive. Production heavy but supplies tight for non-essential uses.

Baltimore, Oct. 28.—The market for sulphuric acid is moving along devoid of any changes, with the requirements of the government on the increase. Buying by the trade generally must be adjusted to the requirements of the army and navy, with the result that it is not always possible to meet all needs. Conditions in this respect, however, hold out a definite prospect for improvement because of impressive additions being made to the productive facilities. Price ceilings are subject to some variation because the quotations prevalent last March, the tops for which month constitute the basis for the ceilings, were not uniform. These variations, however, are not material and the market is well stabilized. Approximate price levels are:—98 percent acid, $17.83 per ton; 66-degree acid, $16.95 per ton; and 60-degree acid, $14.13 per ton. Oleum is still quoted at $19 per ton for 20 percent supplies, both pyrites and brimatone.

Insecticides

Demand for insecticides was about unchanged in general last week from levels that have prevailed over the past several weeks. The market position of the various items showed little alteration and no price revisions were observed. Calcium arsenate and lead arsenate made from arsenic on hand

Manganese

Announcement by the Office of Price Administration last week of a maximum price regulation for manganese ores, designed to stabilize the major cost element for manganese alloys, and to become effective November 9, focussed the spotlight in the trade on manganese.

The situation in manganese today, the War Production Board informs, follows closely the pattern of the problem in other important alloying metals. That is, in contrast to pre-war years when imports more than matched our normal requirements, this country now must count on domestic production, largely from low-grade ore, to meet from 25 to 35 percent of our essential needs.

Where the other metals are solely necessary for their use in alloy steels, manganese is an absolute requirement in every pound of steel produced, non-alloy as well as alloy types. Normally, for every ton of steel produced, about 13 tons of manganese are required, for it is the manganese, acting as a purifying agent, which makes steel sound and clean.

The United States has never produced more than negligible amounts of manganese because deposits in this country are largely low-grade and the engineering and technical problems involved in recovering manganese from domestic ores have been extremely difficult to solve. In 1940, imports of the metal amounted to 1,294,000 long tons, or more than sufficient for consumption amounting to 1,260,000 long tons. In that year our own production was only 40,000 tons. The main sources of our foreign supply, in order of importance, were the Gold Coast, the Union of South Africa, Brazil, India, Russia, Cuba and the Philippines.

WPB reports that every effort is being made to increase imports from sources still open to this country and to step up domestic production to the maximum. Remarkable success has already been achieved in the expansion of domestic output and even more encouraging results are expected to be realized in 1943.

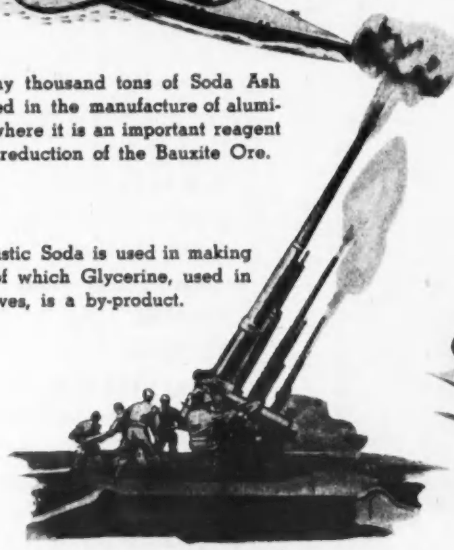
DIAMOND PRODUCTS GO TO WAR

★ For every pound of rayon made by the viscose method, approximately one pound of Caustic Soda is used.

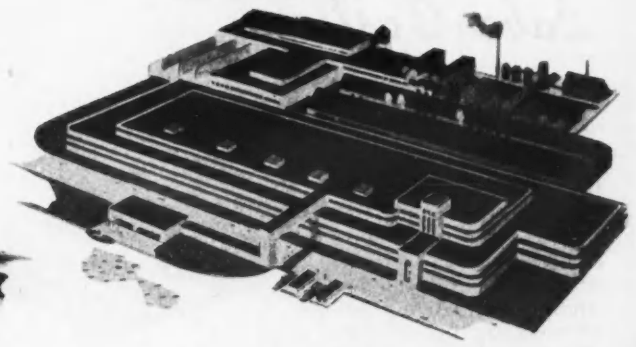
★ Chlorine enters into the manufacture of Ethylene Glycol—used for cooling liquid-cooled airplane and automotive engines.

★ Many thousand tons of Soda Ash are used in the manufacture of aluminum, where it is an important reagent in the reduction of the Bauxite Ore.

★ In munitions factories, synthetic solvents made from Chlorine and Alkali Cleaners are used to clean metal parts faster, thus speeding the production of war materials of all kinds.



★ Caustic Soda is used in making soap, of which Glycerine, used in explosives, is a by-product.



★ The manufacture of TNT used in bombs and shells requires Soda Ash in one step of the process.

Peacetime uses for Diamond Alkalies give way to War Requirements . . .

Today the war effort comes first with Diamond, as it does with you. Shown here are a few of the intensified, war-inspired applications for Diamond products that must be satisfied before civilian uses can be served.

When every ounce of effort is devoted to the one job of winning the war, maximum production must be maintained without sacrificing quality. Diamond is meeting this challenge!

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prior to effective date of M-152 now subject to WPB control.

Calcium Arsenate.—Material in active demand. Prices unchanged.

Lead Arsenate.—Light demand with tone steady.

Methyl Bromide.—Position unaltered. Quotations same.

Nicotine Sulphate.—Material in good supply. Price movements lacking.

Paradichlorobenzene.—Tight supply situation prevails. Position unchanged with undertone very firm.

— OPD : 72d Year —

Chemical Workers' Pay Increased in August

Hourly earnings of factory workers in chemical and related fields increased 0.4 percent between July and August, according to data reported July 19 by the Secretary of Labor. An increase in the average hours worked raised these workers' weekly earnings 1.2 percent to an average of $39.35. This compared with an average of $29.12 for all nondurable goods manufacturing.

July-August comparisons in chemical and related lines were reported as follows:—

Average Earnings

	Weekly	Change (%) from	
	Aug., 1942.	July, 1942.	Aug., 1941.
Chemical, petroleum, and coal products	39.35	+ .8	+17.1
Petroleum refining.	43.54	+1.2	+13.4
Other than petroleum refining	38.03	+ .8	+18.3
Chemicals	41.73	− .7	+15.9
Cottonseed—oil, cake, and meal..	17.95	+ .6	+22.0
Druggists' preparations	29.00	+2.0	+ 7.1
Explosives	45.57	+ .8	+17.8
Fertilizers	22.39	−1.5	+21.8
Paints and varnishes	35.90	+1.4	+ 9.4
Rayon and allied products	33.31	+2.6	+16.5
Soap	36.28	+3.3	+11.1
Crude petroleum production (not included in group above)	39.29	+ .8	+11.4
	Hourly	**Change (%) from**	
	Aug., 1942.	July, 1942.	Aug., 1941.
Chemical, petroleum, and coal products	94.4	+ .4	+13.0
Petroleum refining..	112.4	+1.3	+10.2
Other than petroleum refining	89.3	+ .1	+14.3
Chemicals	100.1	+ .1	+14.1
Cottonseed—oil, cake, and meal..	41.4	+ .9	+12.9
Druggists' preparations	73.6	+ .9	+10.8
Explosives	98.8	− .4	+ 9.9
Fertilizers	58.0	−2.0	+13.8
Paints and varnishes	87.0	+ .6	+10.9
Rayon and allied products	82.8	+ .8	+15.0
Soap	88.8	+1.4	+12.4
Crude petroleum production (not included in group above)	102.2	+2.9	+ 9.5

— OPD : 72d Year —

Contribute to the U.S.O.

Match Manufacturers Advisory Group Named

OPD Washington Bureau

Match Manufacturers Industry Advisory Committee has been formed by the Division of Industry Advisory Committees of the War Production Board. J. W. Wizeman, of the Chemicals Branch, is the government presiding officer. Committee members are:—

W. O. Augustine, Diamond Match Company, New York; D. D. Bean, D. D. Bean & Sons Company, East Jaffrey, N. H.; H. H. Brewster, Palmer Match Company, Akron, Ohio; R. G. Fairburn, Berst-Forster-Dixfield, New York; Sully Fruitman, Jersey Match Company, Elizabeth, N. J.; B. Z. Posner, Match Corp. of America, Chicago; A. H. Rosenberg, Universal Match Corporation, St. Louis, Mo.

— OPD : 72d Year —

Oxyacetylene Apparatus Advisory Group Formed

OPD Washington Bureau

Oxyacetylene Apparatus Manufacturers Industry Advisory Committee has been formed by the Advisory Committees of the War Production Board. John Gammell, chief of the electric power section of the General Industrial Equipment Branch, is the government presiding officer. Committee members are:—

Harry H. Reade, Air Reduction Sales Company, New York; L. D. Burnett, Linde Air Products Company, New York; A. J. Fausek, Modern Engineering Company, St. Louis, Mo.; E. A. Daniels, Victor Equipment Company, San Francisco, Calif.; E. L. Mills, Bastian-Blessing Company, Chicago; L. L. McBurney, Smith Welding Equipment Company, Minneapolis, Minn.; Lorn Campbell, jr., Harris-Calorofic Company, Cleveland, and Philip Kearny, K-G Welding & Cutting Equipment Company, New York.

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Dyestuffs, Textile, and Leather Chemicals

Factors in Market for Dyestuffs, Textile, and Leather Chemicals Interested in Reports of Further Arrivals of Important Items Despite Prevailing Tight Import Situation

Factors in the market for dyestuffs, textile, and leather chemicals were interested last week in reports of further arrivals of material despite the tight import situation prevailing today. Among shipments just received were listed 336,000 pounds of myrobalans, 4,778,520 pounds of quebracho extract, 2,185 bags of wattle bark and 6,346 bags of wattle extract, and 8,424 bags of mangrove bark. Factors reported that South American mangrove bark is not to be had, but quoted East African at $60 per ton when available.

Conditions in the market in general showed little change. Contracts on bichromates were being written for 1943 at quotations unchanged from current levels and prices on chestnut bark, hemlock bark, and oakbark extracts are unchanged for the balance of this year.

With prices on egg yolk and egg albumen under Temporary Price Regulation No. 22, with exception on government contracts, it is interesting to note that the Agricultural Marketing Administration accepted offers on 9,909,810 pounds of dried eggs in September. Offers accepted October 1 to October 22 totaled 5,234,657 pounds. Since the first of the year the government has accepted offers on 199,731,867 pounds of dried eggs. Production of dried eggs in September totaled 20,936,198 pounds, compared with 3,653,573 pounds in September, 1941. Storage holdings of frozen eggs on October 1 totaled 234,868,000 pounds, compared with 178,438,000 pounds on October 1, 1941, and 137,831,000 pounds, the 1937-41 average. Reports from egg dryers show 1,687,000 cases of shell and 67,481,000 pounds of frozen eggs ear-marked for drying against commitments on dried egg contracts for delivery to the Federal Surplus Commodities Corporation.

Price Changes

Advanced

None

Reduced

None

Comparative Values

Index numbers compiled from nineteen typical dyestuffs on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
261.5	261.5	261.5	248.6

Market news that may have developed after this report was sent to press will be found on page 4.

Chemicals

Alumina Acetate.—Consumers' requirements no drain on supplies. Quotations show no alterations.

Alumina Chloride.—Regular users' takings light. Material important to war effort. Market tone unchanged. Prices same.

Ammonia Sulphamate.—New developments lacking. No movements as regards quotations.

Antimony Salt.—Tone remains unchanged. No alterations quotably.

Chrome Acetate.—Quotations on solutions steady at levels recently established.

Potash Bichromate.—Priorities rule with general limitation order in effect. Business being written for 1943 at current prices.

Soda Bichromate.—Priorities govern transactions. Contracts being written for 1943 at current quotations.

Soda - Formaldehyde, Sulphoxylate.—No change quotably. Undertone same.

Soda Prussiate. — Light demand. Pricewise, no change.

Sulphamic Acid.—Material under allocation effective Nov. 1. Order defines sulphamic derivatives, which are also included in the order as ammonium and fire retardants made from sulphamic acid.

Zinc Dust.—Demand unchanged from recent levels. No movements pricewise.

Wheat

Starch factors are interested in the Department of Agriculture report that the production of all wheat for 1942 is indicated to be 984,046,000 bushels, an increase of 2 million bushels from September 1. This production compares with 945,937,000 bushels in 1941, and the ten-year (1930-1939) average of 747,507,000 bushels. This year's crop is the second largest in history.

Spring wheat production, indicated by yields at harvest to be 286,338,000 bushels, is about 4 percent above last year's crop of 274,644,000 bushels. The yield of all spring wheat of 20.2 bushels per acre establishes a high record for the United States, and is above last year's yield of 16.9 bushels and the ten-year average of 10.5 bushels by a wide margin. It is a bumper yield in many of the spring wheat states, but there is no single state with a record high yield. The record for the United States is the result of a combination of near-record yield for most of the important states.

Dyestuffs

Annatto.—Position unchanged with undertone firm. No alterations quotably.

Cochineal.—Good inquiry against light supplies. Prices same.

Fustic. — Interest rather steady. Crystal and extract quotations confirmed.

Hypernic.—Steady undertone. No movements pricewise.

Indigo.—Demand for natural material remains light. No change in quotations.

Logwood.—Steady interest in firm market. Import situation continues tight.

Turmeric.—Demand seasonally fair. Prices same. No shipments expected at this time of year.

Sizing Materials

Albumen, Blood.—Light blood albumen in satisfactory supply. Soluble dried blood transactions now governed by allocations but factors look forward to freer movement of material in near future. Quotations confirmed.

Albumen, Egg.—Government takings continue at heavy level. Quotations under Temporary Price Regulation No. 22 with exception on government contracts. Production of dried eggs in September totaled 20,936,198 pounds compared with 3,653,573 pounds in September, 1941. Frozen egg production totaled 3,050,000 pounds compared with 2,845,000 pounds in September last year. Amount of liquid eggs produced for immediate consumption totaled 910,000 pounds compared with 1,473,000 pounds a year ago.

Corn Sugar.—No change in tone. Prices unaltered. Department of Agriculture reports purchases by AMA in September of 800,000 pounds of corn.

Dextrin, Potato.—Demand at recent levels with market devoid of new developments. No change quotably.

Egg Yolk.—Heavy demand from government. Situation similar to that of egg albumen. Large quantities of liquid egg produced from frozen eggs and storage shell eggs now being used for drying to supplement the liquid produced from fresh shell eggs. Approximately 64 percent of the 20,936,198 pounds of dried egg produced in September was dried from liquid obtained from 27,240,000 pounds of frozen eggs and 621,000 cases of storage shell eggs.

Starch, Corn.—Steady domestic call. A proclamation of the commercial corn-producing area for 1943 was printed in the *Federal Register* for October 27. Department of Agriculture reports purchase by AMA in September of 50,500,000 pounds of corn starch. Corn starch price schedules show no change.

Starch, Potato.—New features lacking. Call for material for sizing purposes in good volume. Prices show no alteration.

Starch, Rice.—No new developments. Quotations unaltered. Department of Agriculture reports purchases by AMA in September of 2,700,000 pounds of rice.

Tapioca Flour.—Not available for sizing. Prices same.

Zein.—No change in market tone. Quotations unaltered.

—*Continued on page* 91

Current prices on dyestuffs and tanstuffs are given in the alphabetical list of prices beginning on page 9

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St. Joe Zinc Oxides may be produced with the desired particle size, particle shape or range of particle size and shape. At the oxidizing zone a high color and brightness standard is controlled and maintained. Moreover, rigid control of particle size and shape and the condition of particle surface enables us to produce pigments with a wide range of oil absorption.

You can obtain in St. Joe Zinc Oxides a maximum degree of color, brightness and smoothness, together with the particular degree of mobility and flow desired.

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National Paint, Varnish & Lacquer Association

"Convention-at-Home" Proceedings

Fifty-fourth Annual Statutory Meeting: Washington, October 29, 1942

Question Forum

To give an opportunity to the members to ask questions on problems uppermost in their minds, much as they would do on the convention floor following presentation of an address, a Question and Answer Forum was devised for the "Convention-At-Home." Blank forms were widely distributed with an invitation to submit problems. They reached Washington headquarters in profusion, and were referred to staff experts as well as to those authorities who were preparing papers on the questions involved. Here are the questions and answers as released for publication:

Production Requirements

PD-25A or Preference Rating

Is it desirable for a manufacturer who does not qualify as a Class I producer to file PD-25A applications, or is it more desirable to extend preference ratings?

This is, of course, the very first question that every manufacturer who is not a Class I producer must ask himself and it appears to be pretty much a matter of individual determination. The PRP producer in assigned rating which he may apply in the purchase of materials prior to his actual need for them while those not operating under PRP can extend the ratings attached to orders placed with them by their customers, but only after such orders have been placed. On the one hand there is the bookkeeping involved in setting up records to provide the necessary information for filing PD-25A and on the other there is the bookkeeping involved in determining quantities of materials which can be purchased with ratings attached to multitudinous small orders. PRP producers have been given an AA-2X rating for maintenance and repairs for the fourth quarter and so far as their purchases of

—Continued on page 57

The New Vice-President

E. D. Griffin

E. D. Griffin, elected vice-president of the National Paint, Varnish and Lacquer Association for the 1942-43 term, is a vice-president of the Pittsburgh Plate Glass Company, Pittsburgh. He joined the company in 1903, working in the Cleveland office as an accountant. When the warehouse in Dallas, Texas, was opened in 1907, Mr. Griffin was transferred there, and in 1912 was made manager of the warehouse at Houston. Later he held the same position at Kansas City and Philadelphia.

In 1935, Mr. Griffin was moved to Milwaukee and placed in entire charge of the paint division, including manufacture, and in the same year he was made a director of the company. In 1938 he was made a vice-president and went to the headquarters in Pittsburgh.

Highlights of Industry's Story

What has the paint and varnish industry accomplished in the ten months since Pearl Harbor? What have been its contributions to the nation's armed effort and what to the civilian economy? What supply and manufacturing problems have had to be solved? What does the future hold, with the global conflict now entering its fourth Winter and every source of American productive might pledged to the cause of victory against the enemy? Answers to these grave questions and others closely related to them were given in a symposium of reports, papers and statements distributed last week to the members of the National Paint, Varnish and Lacquer Association through the means of a "Convention-at-Home," in lieu of an annual convention.

OIL, PAINT AND DRUG REPORTER herewith presents these proceedings, partly in full and partly in digest form, with this summary, which gives the highlights of a truly remarkable achievement through planned cooperation, which will continue to function to solve the industry problems as they develop in the coming months.

In brief, the paint and varnish industry through its association enlisted in national defense as far back as June 3, 1940; its full technical and productive services were placed at the disposal of the government; all needs of the armed forces and war plants for protective coatings have been supplied; fuller and better service than ever before is now the proclaimed goal. At the same time, the industry is mindful of its responsibilities to aid in national conservation of the vast wealth represented by existing property and equipment.

Materials controls were among the earliest problems resulting from the war. The association's and the industry's technical staffs have worked with splendid accord with government agencies in the development of specifications, and have achieved notable results in reformulations, and use of replacement materials. This is a continuing challenge which is met as new controls develop. The matter of priorities and allocations has been the subject of intense study and a complete service to industry members.

Great technical advancement in industry processes may be expected as the result of research already undertaken in the face of critical shortages and cessation of imported supplies, and also through future studies of opportunities that now present themselves, notably in the matter of oils.

Concentration of production and plant conversion are among the national problems now crystallizing, and their possible effect on the paint and varnish industry is being closely studied by the association.

Transportation, likewise, is now to be a major war control, as the ODT is preparing orders calculated to provide the maximum free flow of armed forces and essential war supplies. Cross-hauling and the uneconomic use of freight space are elements in this picture.

Dominant problem of the moment for the paint and varnish industry is that of containers for its products. Steel is scarce and controls will tighten. Association experts have been studying the subject and present their views on the outlook for drums, pails and smaller packages.

Manpower, also, looms larger and larger in the overall national war economy, with its inevitable implications for the paint and varnish industry. Other matters uppermost in the minds of manufacturers are industrial sales and trade sales. With every indication of growing demands for protective coatings for the war effort, how will these divisions of the industry fare?

The problems here indicated are treated at length in the "Convention-at-Home" proceedings, and variations of them are contained in the Questions Forum which was devised as a means of giving the membership an opportunity to bring into discussion the particular matters of most direct concern to them.

A statutory meeting of the Association, for the election of officers and directors, was held in Washington on October 29.

N.P.V.L.A. Officers for 1942-43

(Elected at Statutory Meeting in Washington, October 29, 1942)

President (3-year term)—Ernest T. Trigg, 1500 Rhode Island avenue, N. W., Washington.

Vice-president (1-year term)—E. D. Griffin, Pittsburgh Plate Glass Company, Pittsburgh.

Treasurer (1-year term)—E. A. Foy, jr., Foy Paint Company, Cincinnati.

Regional vice-presidents (1-year term)—

New England—J. Dwight Morton, Carpenter-Morton Company, Boston.

Eastern—M. J. Merkin, M. J. Merkin Paint Company, New York.

Central—R. O. Clark, Jewel Paint & Varnish Company, Chicago.

Southern—Ralph F. Schaefer, Schaefer Varnish Company, Louisville.

Southwestern—Frank A. Pratt, Pratt Paint & Varnish Company, Dallas, Tex.

Western—Oliver S. Orrick, General Paint Corporation, San Francisco.

Vice-president representing the Wholesale Division—A. F. Winstel, Saeger-Winstel Company, Cincinnati.

Executive committee (3-year term)—D. A. Kohr, Lowe Brothers Company, Dayton, Ohio; DeLancey Kountze, Devoe & Raynolds Company, New York; H. A. Melum, Benjamin Moore & Co., Chicago; Ralph M. Newmann, New Jersey Zinc Company, New York; Charles J. Roh, Murphy Varnish Company, Newark, N. J.; W. M. Zintl, E. I. duPont de Nemours & Co., Wilmington, Del.

Secretary—Reuel W. Elton, Washington.

President's Report

National problems in the war-time economy as they impinge on the paint, varnish and lacquer industry were broadly considered in the theme paper, "Produce and Conserve," prepared by Ernest T. Trigg, president of the National Paint, Varnish and Lacquer Association, for distribution as part of the "Convention-at-Home" proceedings. The government's war paint requirements, concentration of civilian production, industry concentration, transportation and manpower were studied and presented in terms of the industry's determination and preparedness to serve the country's best interests.

Mr. Trigg emphasized the basic obligation to produce to the utmost in order to supply the government's requirements for its fighting forces, as well as the industry's responsibil-

Ernest T. Trigg

Renamed President for Three Years

ity to provide conservation of American property and equipment through essential protective coatings.

The paper was prepared on October 15 for distribution on October 28 and it is necessarily subject to any changes which may have taken place in the interim. The text follows:—

Effect of War on Industry

War, unannounced and treacherous, has come upon us since our last Convention. We have felt its ill effects, but have not as yet felt its full impact. This industry will serve and serve well, as it has always done, and it is our belief that your Association will enable it to render fuller and better service than ever before. That is our goal. It is useless for us to count the cost, but it is necessary to look ahead as far as we are able in order to be prepared to meet the ever-increasing demands upon us. We do not lack strength. We must not lack vision.

We believe the members of the industry wholeheartedly concur in our cancelling the regular convention arrangements for this year in order to contribute to the saving of transportation in conformity with the frequent requests of the government through the Office of Defense Transportation.

In doing this, we sacrifice one of the most valuable features of a convention, that is, the opportunity to discuss our common problems on the convention floor and visit with our associates and competitors outside of the convention proper. However, this is only one of the sacrifices which we are called upon to make and there will probably be more of them and perhaps of a more serious nature before the United Nations win the war and peace is restored.

Reuel W. Elton
N.P.V.L.A. Secretary

We are indebted to Harry J. Schnell of the Oil, Paint and Drug Reporter for a suggestion made in June last that if our regular convention did not seem desirable for this year, its purposes might be substantially accomplished by mail and this seems to be the best substitute.

Through our "Convention-At-Home," with which you are all familiar, you will receive by mail each day during the three days originally set aside for the convention proper, that is, October 28, 29 and 30, messages from those men who have so graciously agreed to be on the "Convention-At-Home" program. To accomplish this, we have gladly taken advantage of the offer of A. F. Voss, of the American Paint Journal, to publish and distribute the Convention Daily, which as you know for many years has been a regular feature at our annual meetings.

The other trade papers have assured us of their full cooperation in publicizing and reviewing the proceedings of our "Convention-At-Home" in their regular issues.

It is believed that the prepared addresses and statements which are being sent you will supply the answer to many questions which have been bothering members of this industry.

We are under deep obligation to all of the men who have prepared addresses or statements which are being sent to you, and we take this means on behalf of the industry as a whole of expressing the industry's sincere thanks to them.

Statutory Annual Meeting

In order to afford all Class A members and all local associations an opportunity to vote, as contemplated by the by-laws, proxies have been requested authorizing Messrs. Charles W. Eastwood, Horace S. Felton and Frank L. Sulzberger to represent them at this meeting. A summary of the proceedings will be sent to all members.

On behalf of the entire association, I express our sincere appreciation to the members of the industry who, through committees and otherwise, have so loyally and faithfully served the best interests of the industry during this very trying year. Space will not permit reference to all of the individuals who have so freely and constructively given of their time and effort at their own expense to help solve the many diverse and difficult questions which have arisen. It is an outstanding evidence of constructive unselfishness and is a tribute to the character and vision of the members of this industry.

I would be remiss if I did not at this time express the appreciation which I know you all feel to every member of your headquarters staff for their conscientious efforts and ready and willing application to any task assigned to them. Much of our routine work has been interrupted by the pressure of immediate and oftentimes unanticipated problems. The result is that the members of your National organization are taking on whatever there is to be done and dealing with the most important problems first.

Activities of Association

Your association has had many new and difficult problems to deal with during the year. Our entrance into the war immediately following Pearl Harbor crystallized the need for production of military requirements in volume never before thought of. Raw materials and services to insure constantly increasing output had to be made available with the result that orders to control and limit critical raw materials were for some time issued almost daily. Furthermore, the picture was changing from day to day and it was difficult even for those in a position to keep in the closest kind of contact to keep currently advised with respect to all that was happening.

In the main, the only available source of information for the public generally was the daily press. Realizing the seriousness of this situation, your national association quickly organized its staff to keep thoroughly advised with respect to all official orders and interpretations specifically affecting this industry and has kept all members of the industry closely informed, sometimes sending to manufacturers as many as three communications in one day. Since December 7 (Pearl Harbor), we have sent over 150 letters to the members of the industry bearing solely on government matters having to do with war problems as they affected us. We take this means of thanking the many members of the industry for their messages of appreciation of this service. We shall continue this service to the industry, which we believe under the circumstances assumes greater importance than anything else.

The regular activities of the association have been maintained, some in a more or less "skeleton" form, and these too will be continued. All the members of the staff regardless of their previous assignments are now engaged in war work for the industry, and each one regardless of the department with which he is connected is keeping in close touch with the war situation and is "pinch hitting" wherever necessary.

In this manner your Washington office is in fact a clearing house for, and headquarters of, the industry and is rendering specific service in this time of national emergency, which is not available to the members of this industry from any other source. Requests for information from manufacturers personally and by mail, telegrams, long distance telephone are unprecedented and continue to increase. Every member of the organization is "up on his toes" and so far as possible every communication and inquiry bearing on war questions is answered the day it is received. This is not possible in every instance and when delays of a day or two occur in making replies, it is unavoidable.

Your national association is more and more being called upon by government agencies for information and for cooperation on various matters having to do with the paint industry. Typical of this are the requests for assistance through the Scientific Section on specifications and on the development of new paint products for war purposes, many of which are of a confidential nature. The Conservation Division of WPB has requested and received the best kind of cooperation from our clean up and paint up campaign bureau on the subject of conservation of property through paint.

Every day one or more members of your staff attend meetings of groups or committees having to do with war problems. Frequently such meetings are held in your headquarters building.

All members of the industry have the services of this organization available to them and are assured that if we do not have the answers to questions immediately available we will leave nothing undone to obtain them and inform you promptly.

Membership Increases

During the year just closed, our membership shows a net increase of ninety-two. This is an all-time high. I am sure it is gratifying to all of you to know that your association has an unbroken record of an increase in its membership every year since the consolidation of the National Paint, Oil and Varnish Association and the American Paint and Varnish Manufacturers' Association into the National Paint, Varnish and Lacquer Association in 1933.

Financial Condition

The financial condition of the association continues to be satisfactory as indicated by the treasurer's report, which will be made to the statutory meeting.

Volume of Business

Consumer spending for "all purposes" still exceeds government spending despite extreme war effort.

The industry's volume of business for the first eight months of this calendar year, that is, from January 1 to August 31, shows a decrease of less than one percent as compared to the same eight months in 1941. These figures are based on the monthly reports of the Bureau of the Census, U. S. Department of Commerce, the latest returns being those for the month of August. It should be remembered that 1941 was 35 percent ahead of 1940. The sales for the first eight months of this year show an increase of 32.2 percent over the same eight months of 1940 and 17.6 percent increase over the same eight months of 1929, which was the largest year the industry has ever had excepting only 1941.

Obviously, it would be foolhardy for anyone to prophesy the trends so far as volume of sales in any industry is concerned even over the next few months. While there are no definite figures available, we believe it is a fair statement to make that the paint business, resulting directly and indirectly from the war, so far in 1942 represents in the aggregate approximately 60 percent of our total volume. This is as against an estimate of 25 percent in 1941 caused by the defense program, and probably somewhat less than 5 percent of government business in normal times.

As the government's "all-purpose" expenditures increase, we may expect their paint requirements will continue to increase, although not at as rapid a rate as is indicated by the "all-purpose" figures. It is apparent that the civilian business over the period we are discussing has shown some falling off, and it is possible that there may be a further decrease in this type of sales due to increasing war needs for raw materials, containers and services. No one can say with definite knowledge the effect government paint needs will have on our aggregate volume for the balance of this year and for 1943.

"Does It Fight, Float, or Fly"

New and constantly changing problems due to the war are uppermost in the minds of all of us. The priorities test is no longer so-called "war-use" vs. civilian, but "does it fight, float, or fly." Intensified material controls are developing and will probably become more intense. The Smaller War Plants Division of WPB is being decentralized. A board of engineering consultants has been appointed to try to put life into that division. Its chief tells us "We will take the work to the men"—not increase migration by building more large war plants.

National Problem Crystallizing

Out of the confusion of the past months, a confusion which is quite understandable in view of the enormous production task undertaken, interest is now commencing to crystallize on five so far unsolved problems:

(1) Concentration of civilian production.

(2) Selection of nucleus plants where concentration in an industry is deemed necessary.

(3) Taking up the slack in rail and rubber transportation by reducing crosshauling and routing cars directly to destination regardless of shippers' preferential routing.

(4) Maximum use of all manpower (and womanpower).

(5) Utilization of facilities made idle by concentration.

Actually these subjects are all parts of the same problem, that of trimming everything else to be able to provide for a 10,000,000-man fighting force (including services) and the still larger force required to produce and deliver the necessary munitions and supplies.

Newspapers and Washington news letters have carried stories about various aspects of the problem, but have not connected them up as parts of a single problem.

British Experience

Much reference is made to the British experience, but we are told that because American industries are far more numerous, more widely scattered, more accessible to local materials and local markets, and manpower is not so critical, our methods must be different. Right now, it would appear that speaking for production as a whole, transportation relief and manpower relief is needed more than further curtailment of materials for use of civilian plants for war or storage.

Pooling or concentration started in England in March, 1941. Agreements between companies within an industry were voluntary at first, negotiated by the Board of Trade, but later the work was taken over by the government (here because of antitrust laws, pooling requires government approval). Industries pooled in England include steel, glazed tile, woodwork, jute, silk, wool, cotton, rayon, paper, bedding, bicycles, clothing, cutlery, hosiery, holloware, jewelry, leather goods, pencils, pottery. Trade names are being preserved wherever possible. For instance, all pencils are identical and all devoid of tip, eraser, lacquer and gilt lettering, but the brand names are stamped into the unadorned wood in the proportion established to be the prewar production ratio and each company does its own marketing.

In a letter from one of the paint manufacturers in London, dated September 9, he says:—"No paint plants have yet been closed down and so far there are no definite plans to do so."

Concentration in United States

So far as this country is concerned, concentration discussions at present anyway seem to limit it to industries whose permissible production is cut below fifty percent of production capacity. Typewriters have already been concentrated in one plant. Metal beds and springs are out. Of 245 stove plants (except electric), ninety-two have been shut down and production concentrated. Concentration moves are made only after consultation with the industries involved. Petroleum refineries are now in process of concentration. In the cosmetics industry, a WPB transportation committee has been given the assignment to work out plans to reduce crosshauling. Distillers have agreed to voluntary conversion to industrial ethyl alcohol.

E. A. Foy, Jr.
N. P. V. L. A. Treasurer

That shows the trend. How far and how fast it will go, no one can tell. We are at war. With perhaps 10,000,000 men to be in the armed forces (including those having to do with supplies), and a substantial number of men or women necessary to keep a man in the field, no one can close his eyes to the probability of further concentration. And, while, as I have indicated, the program so far seems to limit it to industries whose permissible production is cut below 50 percent of production capacity, these are not normal times, and "production capacity" need not mean peacetime capacity but an "all-out" capacity; so let us not dismiss the problem as something we are sure will not affect us because the industry is contributing very substantially to the war effort.

Prime Consideration of Nucleus Plants

The prime consideration with respect to establishing nucleus plants where an industry is concentrated, include the following:—

(1) Must be distributed geographically to reduce crosshauls and supply nearby markets.

(2) Must avoid cities where labor supply is critical.

(3) Must avoid cities where power supply is critical.

(4) Must avoid cities in which warehouse space will be needed to care for shipments enroute overseas.

(5) Should be handy to sources of raw materials.

(6) Must be well managed, capable of economical production, preferably with reputation of being cooperative in the industry rather than "lone wolf."

Transportation

In some quarters, a crisis in rail transportation is expected next spring. This winter, numerous power failures are anticipated because locomotives are pushed to the limit with no time for proper overhauls. Rails are failing. Orders for equipment and rails must be placed now for spring delivery. ODT says WPB will not allocate steel to railroads until the slack is taken out of transportation. Slack may be defined as (1) unnecessary crosshauls, and (2) circuitous routing.

We believe it is safe to say that there is no immediate transportation crisis, but there will be by spring unless orders for equipment and rails are placed and accepted soon. Roads must carry 25 to 30 percent more tonnage by then. Some embargoes on passenger service have already been made and other embargoes may come this winter limited to certain points for specified periods and probably also limited to certain commodities. We are told that fruits and vegetables, beer and potatoes may be restricted to limited mileage—50 miles, 100 miles or 250 miles from origin where embargoes become necessary.

Manpower

Paul V. McNutt, chairman of the War Manpower Commission, says an additional 5,000,000 men and 5,000,000 women must be had within twelve months, the men largely from civilian industries, and the women from offices, domestic service, high schools and the ranks of housewives. He states that much of the unbalance is in geographical distribution of labor. He is striving to get new war contracts placed in non-critical areas.

Our industry is pretty well distributed over the country; based on population and employment it is in relatively small units with a low ratio of employees per

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unit of production. We are advised that already some paint factories needing employees to replace those who have enlisted or been drafted, have engaged the services of women for certain types of work and this can doubtless be carried further.

In Hands of WPB

The problem of concentration is in the hands of WPB and such developments as may ultimately be deemed necessary with respect to our industry will clear through the Protective Coatings Section of WPB. This section, together with other sections and branches of WPB, acting under instructions from Mr. Nelson, has set up a transportation committee for the purpose of making a thorough survey and report on the transportation situation in the paint industry, particularly from the standpoint of crosshauling.

Conversion

Because of the uncertainties ahead of us, your national association has engaged the services of an engineer-chemist, Herbert Wachsmann, to study the problem of possible conversion of the machinery and equipment used in making paint, varnish and lacquer to the production of other military requirements. The primary purpose of this study is to be prepared to convert our facilities to specific war necessities should the government find it necessary; and secondarily to determine whether any potentially idle equipment or labor may be employed on such work. Investigation may show that there are inadequate supplies of important war materials where the shortage is due to insufficient productive capacity and which materials might, with some possible rearrangements and occasional minor new pieces of equipment, be produced in our factories.

As previously indicated, it is the definite plan of the government to utilize existing plants and equipment so far as possible and to discourage the building and equipment of new plants. This is obviously the logical thing to do as it saves time in the construction of both buildings and equipment; it saves vital materials so badly needed elsewhere, it saves transportation of the materials involved, and it saves the manpower which would be required.

The most difficult problem in this matter is getting "leads" with respect to war requirements which might be produced with our equipment. An intensive study of this is in progress. We have already invited the members of the industry to give us any suggestions which they or any other member of their organization may have to that end. You are again urged to send your suggestions in, no matter how far removed they may be from any previous thinking, provided you feel they contain an element of possibility. We will follow through with whatever development may be necessary with WPB. E. H. Bucy is the chief and Wells Martin, assistant chief of the Protective Coatings Section. The Chemicals Branch under the leadership of Dr. Reid and the Protective Coatings Section, under the leadership of Mr. Bucy and Mr. Martin, are functioning intelligently, actively and effectively in their job of helping to win the war from the standpoint of the paint industry. We take this means of publicly complimenting them and all of the other splendid men connected with that branch and our section of it on the excellent work they are doing.

Government Contacts

Your national organization is constantly in contact with all government agencies dealing directly or indirectly with the war. The two most active agencies at this time are, of course, the War Production Board (WPB) and the Office of Price Administration (OPA). In addition to our almost daily contacts with these two agencies and their branches we have established and maintained regular contacts with all of the various divisions and sections of the army, navy, maritime commission, Department of Commerce, Department of Agriculture, State Department and Treasury Department on matters directly or indirectly affecting the paint industry.

Protective Coatings Section

The Chemicals Branch of WPB, of which Dr. E. W. Reid is the chief, includes the Protective Coatings Section, which is this industry's direct contact

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Herbert Wachsmann

N.P.V.L.A. Conversion Consultant

Industry's Part In the War Effort

In a supplemental paper, Ernest T. Trigg, president of the National Paint, Varnish and Lacquer Association, gave specific answers to the question, "What are the outstanding contributions made by the paint industry to the war effort?" He recalled the association's letter to President Roosevelt on June 3, 1940, enlisting in national defense, told of the intensive development of a plan to facilitate contact between industry members and government agencies and of the inauguration of a priorities service. Conferences with government agencies had become an established factor long before Pearl Harbor, and contacts of reciprocal benefit are now maintained with thirty-two government groups. The Scientific Section has been of enormous help to all branches, most of it of a secret nature, and the government has welcomed the continuing activities of the Clean Up and Paint Up Campaign. Most recent undertaking is a conversion survey, which Herbert Wachsmann is conducting on leave from OPA.

Maintenance of the distributive system and of the paint consciousness of the American people are also parts of the fundamental service, of value alike to government and the industry.

Mr. Trigg paid tribute to the association staff's 100 percent war bond subscription, and to the yeoman service of committee members whose wholehearted cooperation in regular and special meetings and conferences has greatly furthered association accomplishments.

Committee reports, which also formed part of the "Convention-at-Home" proceedings, detail the enormous amount of work done in the past year.

Office of Price Administration

As a result of many appeals for price relief under the general maximum price regulation, which fixes March, 1942, paint prices as a ceiling, the Office of Price Administration has made a rather exhaustive study of the cost and selling prices in the paint industry. They are familiar in detail with the increased cost of raw materials, of labor and of packages, which has occurred since present ceiling prices in the industry were established. They are also familiar with the fact that although our aggregate volume from January 1 to August 31 compares favorably with 1941, the current trend is unsatisfactory. Since approximately April 1 our volume has steadily declined, and the effect of the decline has unfortunately been emphasized by the fact that the increased volume of war business has on the average been sold at extremely low prices resulting in a material reduction in our gross percentage of profit. They also understand that favorable raw material contracts which might have been in existence last Fall, or in some cases possibly in the early months of this year, no longer exist. This subject is very much alive in OPA and it is hoped that they will shortly provide some relief to us.

At our convention a year ago, we unanimously endorsed the principles involved in the activities of the Office of Price Administration from the standpoint of preventing, or at least controlling, inflation and I am confident that if we were in session again this year, we would repeat our endorsement of these principles.

However, the Act of Congress, creating the Office of Price Administration, recognizes that its functioning may create some "hardships," and we feel confident that those responsible for the administration of that office are sympathetic to a proper consideration and adjustment of such situations when the circumstances justify it.

Raw Material Survey

Attached to this statement is a current report on the raw materials situation affecting the important products of this industry. As the question of containers so immediately important to us will be discussed in a separate paper during this "Convention-At-Home" and is also covered in the Raw Material Report, I will make no further comments on it.

Living Up to Specifications

I would be remiss in my duty if I did not call the industry's attention to the necessity for strictly living up to the requirements of specifications covering all products furnished to the government when such products are sold on the basis of a specification. Production under pressure for quick delivery should cause no relaxation of the vigilance of any contractor in this respect. Steps are being taken by the government to require affidavits and other legal commitments to assure delivery of the material specified. This is no reflection on this industry but a wise precaution to assure success of the war effort.

Scientific Section—35 Years

I doubt if there is any other industry in the United States which has a record of so long a period of unbroken service in the field of scientific research and development as our industry has with our Scientific Section. It was in October, 1907—thirty-five years ago—that this work was started under the chairmanship of Robert S. Perry, now deceased. The first two employees who came into this work at that time, were Dr. Henry A. Gardner, as Mr. Perry's assistant, and Paul Butler. Dr. Gardner succeeded Mr. Perry as Director in 1908. Both of those men have an unbroken record of service with us and they are both still actively at work on the many technical problems which are so important to the industry and to the government. The executive committee at its meeting held on October 20 recognized the long term of service of these men by presenting to each an engrossed certificate of merit and of appreciation.

I am making special mention of this, as I am sure you are all proud of this fine record and that you join with your officers and the executive committee in expressing your appreciation to both Dr. Gardner and Mr. Butler for their long, faithful and effective service in the industry's interest and wish for them many more years of activity in our affairs.

War Materials and Civilian Property

Our industry has been and is performing yeoman service in this most critical time of our national existence. That the industry's volume of business increased as it did in 1941 and has held up so well for the first eight months of this year, may be considered as secondary to the fact that we are furnishing needed protective materials to make the implements of war as useful, safe and dependable as possible, to provide concealment for strategic war purposes, and to provide conservation of civilian property and equipment of all kinds, thereby avoiding the necessity for replacement of such property. This is our industry's part in the war.

The Place of Paint in War

The importance of the products of this industry is, we believe, more fully appreciated today than ever before. There are frequent indications of a proper recognition of the protective properties of paint, such as appeared in a publication known as "The Chemical Digest," Volume 8, No. 2, from which I quote:—

"Because protective coatings are nonspectacular, their real importance to war is not appreciated. It has been reliably said that even in the last conflict without paint and varnish the effective life of warfare equipment would have been something less than a week. Thus the present conflict, with its tremendous emphasis on mechanical equipment, greatly increases the important role of protective coatings.

"Ships, planes, tanks, trucks, guns, and shells all have surfaces that deteriorate unless coated. Shells not only are coded with paints of bright, easily recognized colors but their inner surfaces are coated to prevent corrosion which may affect the explosive charge. Probably as near as paint approaches the spectacular is in its use for the riotous colored and bizarre designs the public associates with the skill of the camoufleur so much needed to divert the bomber's eye from strategic plants, hospitals, docks hangars and gun emplacements.

"Thus the protective coating is really one of the wheelhorses of war. And we suspect the protection-dispensing Japs little realized when they disrupted tung oil shipments ten years back that they would give impetus to a bit of research which now adds its relentless weight to the odds already against them."

Produce and Conserve

The theme of this "Convention-At-Home" expresses the outstanding government necessities—"Produce and Conserve." Our industry is doing both in a full measure. Not only are we doing our part as an industry, but paint men both in a national and a local way are taking on their full share of responsibility and work with respect to the whole war effort. We all know there is a job to do and we are all doing our part to the best of our ability.

Post-War Rebuilding

The war may be over sooner than we expect. Whenever that may be, we will have finished one job only to face another—not only the rebuilding of material things, but the rebuilding and molding the spirit of people under changed conditions. We so often hear the view expressed that there will always be wars, because perhaps, there always have been.

It would be discouraging indeed to believe that in this age men are like ants that build and rebuild and must patiently continue to rebuild when a calamity overtakes them. This war strains our every nerve and our great resources and will burden our children and our children's children. Absorbed as we are in the immediate task ahead, let us look forward to our opportunity to assume our place in world leadership in rebuilding in such a manner—so carefully and thoroughly, so wisely and so justly, that we have not merely passed on a burden to our children, but a rebuilt civilization that is well worth paying for.

Raw Material Survey

As an integral part of Mr. Trigg's report to the industry, he included a survey of the raw materials situation, which is as follows:—

The following information with regard to some of the important raw materials of our industry has been furnished to us from authoritative sources and is given to you for your information. As the information contained in this report was submitted on or before October 20, due allowance must be made for any changes in conditions which may occur prior to the date of publication, namely, October 28.

Titanium

The demand for titanium pigments last Winter and early Spring far exceeded the supply. This condition resulted in strict allocation under government order. In May the situation reversed itself and consuming industries found themselves with large inventories to be worked off. Since then the supply has far exceeded the demand. War requirements have not taken up the slack in civilian consumption and little improvement is anticipated over the balance of the year.

The raw material position is satisfactory, at least until the new year, and all requirements for both war and civilian use can be met promptly. Purchasers can assist in assuring the continued availability of certain raw materials by extending preference ratings whenever possible and by using appropriate end use symbols to identify titanium pigments intended for war purposes.

Zinc Oxide and Zinc Sulfide

Zinc oxide (French process) is produced from metallic slab zinc. General Preference Order M-11, as amended May 1, 1942, places all slab zinc under complete allocation by the War Production Board, so that the manufacture of French process zinc oxide is dependent entirely upon the quantity of slab zinc allocated

M. J. Merkin

Eastern Zone Vice-president

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SOLVENTS & CHEMICAL CORPORATION

245 FIFTH AVENUE NEW YORK, N.Y.

J. Dwight Morton
New England Zone Vice-president

by the War Production Board for this purpose. This places zinc oxide made from metal in a very close position, for the reason that the War Production Board allocates slab zinc only on the basis of preference ratings, and therefore it is essential that orders placed for French process zinc oxide show any preference ratings that can be extended. Orders for this type of zinc oxide required to meet the war program are being filled in accordance with the priority ratings extended, so that there is a question as to how long orders can be accepted for civilian uses.

The supply of American process zinc oxide, both lead free and leaded grades, is adequate to meet the demands for civilian uses as well as for the war effort. It would be well to keep in mind that under present conditions this type of zinc oxide should be substituted for the French process grades whenever possible, as American process zinc oxide is more readily available to meet any reasonable increased demand for zinc oxide. Manufacturers need have no hesitancy in formulating with this type of zinc oxide, as no priority ratings are required at this time.

While zinc sulfide pigments are restricted under General Preference Order No. M-128, this order has not actually restricted the use of lithopone or any other zinc sulfide pigments. The supply at the present time is ample to take care of demands and no priority ratings are necessary to secure all requirements for the war effort and civilian supplies.

Lead

Lead continues to be the bright spot in the metal picture. Supplies of pig lead in the hands of the government have been constantly growing and it is estimated that the huge quantities belonging to the taxpayers of the United States at the year end will be equivalent to more than a year's military requirements. So easy has the position of lead become that no further additions are now being made to the lead pool, and efforts are now being made in government circles, as well as in industry, to find places where lead may be used to conserve copper, zinc, steel, chromium, cadmium, rubber and other relatively scarce commodities. Lead pigments show very little change and remain plentiful. White lead-in-oil has felt the general decline in painting during the year. Large supplies are available of both lead-in-oil and dry lead. A similar situation exists in red lead.

Service Leadership Guards the Industry

Tribute to the high intelligence, integrity and understanding of President Ernest T. Trigg and the staff of the association was made in a brief comment, "Leadership in Service," by F. L. Zulzberger, chairman of the executive committee. These qualities, he said, have made them singularly successful in their task of conducting the industry's affairs so that it will contribute a maximum to the winning of the war and at the same time guard against injudicious and unnecessary government decisions which would not advance the war effort but which might be harmful to the industry. He also commented on the devotion to industry welfare of the members of the executive group.

Tung Oil

Diminished imports, restricted use, and ultimately full government control have been the three factors which have characterized the situation with reference to tung oil since the last convention in Chicago.

Total consumption of tung oil for the first six months of 1942 amounted to 7,458,000 pounds in addition to 717,000 pounds for the month of July, and 654,000 pounds for August. Thus, for the first eight months of the current year there has been a total consumption of 8,829,000 pounds. Total factory and warehouse stocks were reported by the Department of Commerce at 33,488,000 pounds as of August 31, 1942. It is of particular interest to note that the Department of Commerce reported factory and warehouse stocks as of July 31, 1942, to be 35,406,000 pounds. Subsequently, 654,000 pounds were reported by the Department to have been consumed during August, but only 33,488,000 pounds remained in factory and warehouse stocks. From these figures there is a disappearance of 1,364,000 pounds which apparently has not been accounted for. In spite of this amount which has disappeared from stock without explanation, indications are that the present supply will be made to last for quite some time.

Hitherto, under Order M-57, manufacturers were permitted to use tung oil in defense orders having preference ratings of A-2 or better, orders placed by Defense Supplies Corporation, orders for the manufacture of can linings for cans to contain food products for human consumption, orders for the manufacture of outside coatings where tung oil is essential to withstand normal food processing, and orders for use to comply with underwriters' regulations, health, sanitary or safety regulations or laws issued by government authority. Beginning November 1, 1942, under amendment issued on October 6, by the War Production Board to further conserve the use of this vital material and to allocate same, users must file application with the War Production Board for authorization to use, consume or process tung oil during any calendar month. Such application must be filed on or before the fifteenth of the month preceding the month for which this authorization is sought. The only exceptions are users of thirty-five pounds or less per month and refining or pressing tung oil. Under this amendment, consumers will have ta look to the War Production Board for fulfillment of their needs. Defense Supplies Corporation will be the only source of supply hereafter.

As members of the trade know, practically the entire bulk of the present stock pile is in the possession of Defense Supplies Corporation, which organization started to acquire a stock pile immediately after December 7, 1941, and since then has succeeded in purchasing all available stocks in this country. Obviously, Defense Supplies Corporation is now the source of supply to the consuming trade.

Although Defense Supplies Corporation has thus far released some oil to qualified users, but in insignificant amounts, it has not yet formulated any definite program for distribution. The exact modus operandi is at best a matter of conjecture at the time of this writing. It has been suggested that services of the usual tung oil dealers in the trade would be employed on a fixed fee basis. In any event, the means would be secondary to prompt release of supply to the trade in any manner which Defense Supplies Corporation seeks to utilize. Moreover, the quantity available to consumers will depend upon the War Production Board's monthly authorization to qualified users.

As for price, the existing ceiling has been placed at 39 cents per pound f.o.b. tankcars (including drums), New York. What the consumer will pay for his oil will depend on Defense Supplies Corporation. However, under the present ceiling, 39 cents will be the top price.

In brief, the entire tung oil situation bears no cause for undue pessimism. With restricted use and equitable allocation by the War Production Board through Defense Supplies Corporation, users who can qualify for tung oil have every assurance that they can depend on the supply for some time.

Dehydrated Castor Oil

Under WPB Order M-235, commencing October 1, all use of castor oil in any form was restricted to specific authorization of WPB, application to be made on form PD-600 for such usage. The reason is obviously because of shortage of supplies. Under such conditions very little can be said. Shipping space has been scarce and arrivals of the beans uncertain and disappointing. Manufacturing capacity was enlarged to a point where substantial increase in the demand for the oil was taken care of, not always in full but quite satisfactorily. The uncertainty centers upon the problem of overcoming the risks of ocean voyage of the beans and providing ocean freight space. Freight allocations are being made on a quota basis, giving due weight to the necessity of each commodity and only essential materials considered. Under these conditions a more restricted use of the oil was unavoidable.

Perilla Oil

No arrivals and none expected. Use of this oil has almost ceased. Stocks of some 3,000 tons in this country and some in Canada, all in manufacturers' hands, are being consumed very slowly and almost reluctantly, and resales are offered without interest.

Oiticica Oil

Under WPB Order M-57, use was permitted on Priorities of A-2 or higher; this expires October 31. Commencing November 1, all usage of oiticica oil is subject to authorization of WPB under Order M-238, application to be made on PD-600. Stocks in the hands of dealers, manufacturers, and government agencies are about 5,000 tons and are being slowly consumed at the current rate of about 4,000 tons per annum. Upon WPB approval of applications on PD-600 the regular importers can arrange for oil from their own or government agency stocks. The new crop commencing next March cannot be estimated, but there is a crop this year compared with total failure a year ago. The shipping of the new crop involves greater difficulty than ever before with the lack of drums, barrels, and ocean freight space. The problem is now being considered, and no doubt arrangements will be made to get some of this essential material here.

Fish Oil

In view of existing circumstances, the fish oil situation cannot be considered as being too unfavorable. The catching season has been under way approximately sixty days, with a rather steady run of fish (in both the Monterey and the San Francisco districts), the catch being quite satisfactory in volume even though the number of boats has been considerably reduced. The yield is reported as being 45 to 48 gallons of oil per ton—a good figure and one which is expected to increase as the season progresses.

The War Production Board reports that no shortage of oil is anticipated, but users are not too unwilling to buy requirements for the next few months, preferring to be protected for at least a portion of their needs.

Prices to consumers are close or at the ceiling, the government supporting the market to the extent of having purchased a reported 350 tanks at slightly below the crude ceiling.

No restrictions have been placed on the consumption of fish oil, and demand from industrial users has been fair, although (as is to be expected) somewhat below normal. (Fish oil, of course, is included with other oils under WPB M-71.)

Linseed Oil

Supplies of linseed oil should be plentiful for all users. The United States has produced a record-breaking crop totaling, according to the last government estimate, over 42,500,000 bushels. In addition to the 38,000,000 to 40,000,000 bushels this will give for crushing purposes, there are prospects at the moment for up to 10,000,000 bushels additional seed to come to this country from Canada. This totals enough seed to take care of all of the needs of the trade in the paint, varnish, linoleum, oil cloth, printing ink and other trades and still leave some for Lend-Lease or even a little for a stock pile.

However, our government is not going to let linseed oil be consumed at as great a rate in all cases as might happen if everybody could have as much oil as he wants. On September 22, WPB Order M-71 was issued in amended form. This

R. O. Clark
Central Zone Vice-president

Ralph F. Schaefer
Southern Zone Vice-president

amendment allows the paint and varnish trade to have during September-December, 1942, only 80 percent of the average of the oils used in September-December, 1940 and 1941. The same sort of formula operates quarterly beginning with the January-March spread for 1943, during which period the paint and varnish trade can use 80 percent of the average of oils used in January-March, 1941 and 1942. Unused quotas from one period can be carried into the next period, but the result will average no more and probably less than the average consumption in the two previous years. Direct or indirect sales to any department of the government, including the Army and Navy, must be part of this 80 percent figure.

There seems to be a strong likelihood that government business on paints and varnish taken or bid on before September 22 will be exempt from this particular provision for the September-December spread of 1942. (An amendment is under consideration which may include government requirements from the quota altogether and provide for some readjustment of the quota as affecting other requirements. Linoleum and oil cloth manufacturers are curtailed to the extent of 70 percent as compared to 80 percent for paint and varnish manufacturers. Distributors of linseed oil must operate on an 80 percent basis.

The large crop in this country, coupled with Canadian imports followed by the curtailment of consumption forced by these orders from Washington will mean the production of more oil than the trade needs or can use and will mean either the creation of a stock pile of linseed oil which will probably be owned by the Commodity Credit Corporation or the shipment of substantial quantities of oil to our Allies under Lend-Lease arrangements.

Apparently all crushers of seed are under contract with the Commodity Credit Corporation for the crushing of seed during the crop year ending August 31, 1942, and on their contracts crushers can borrow on oil stored in their tanks on a non-resource basis 12 cents per pound net cash in Zone 1, 12.2 cents in Zone 2, 12.4 cents in Zones 3 and 8. This borrowing can be done on 40 percent of the linseed oil produced. The effect of this loan program will be to keep the price of linseed oil close to the loan basis as a minimum.

At this writing, stocks of oil and stocks of seed are ample and there is no reason why all customers cannot get every pound of oil they want up to the amount which the government will allow them to use.

Dry Colors

All restrictions on the use of chromium pigments were removed by the amendment to Chromium Order M-18-b issued June 25, and restrictions on their manufacture were removed on September 30, so it is no longer necessary to continue using some of the combination that in the past few months have been resorted to as substitutes for chrome yellow, chrome green, and chromium oxide.

The war program is absorbing an increasing proportion of the chemical colors manufactured, and this trend may be expected to continue. While other color sales have also increased materially during the past few weeks, as inventory positions are worked down, business is still far below what it was a few months ago, and consumers are having no difficulty in procuring all the color they desire, because the various War Production Board orders have restricted industries that under normal conditions are large consumers of pigment colors. There are still indications that colors derived from toluidine may be harder to obtain in the not too-far distant future, particularly if the consumption of colors of this type show only a moderate increase.

Inerts

During the past four months, the consumption of inert pigments has been off considerably. There have been fairly heavy inventories, and the production capacity has not been running full. The situation today is somewhat better so far as the tonnage moving is concerned, but there is a large, idle capacity which it is believed will take care of any developments during the next quarter.

Solvents

Butyl alcohol is on complete allocation under General Preference Order M-159. Supply is very short and ratings of A-10 or better are needed to obtain any.

Butyl acetate—critical, due to the butyl alcohol situation.

Amyl alcohol—critical, due to small production.

Ethyl acetate—available at the present moment.

Methanol—available at the present moment.

Acetic acid—in a firm position, but is available.

Ethyl alcohol—restricted under General Preference Order M-30, amended.

Acetone—available at the present moment.

Methyl ethyl ketone—on allocation under General Preference Order M-169, but is available.

Isopropyl alcohol—on allocation under General Preference Order M-168, but is available.

Nitrocellulose

Soluble nitrocellulose was placed on full allocation under Order M-196 effective September 1. In the procurement of such nitrocellulose, it is necessary to make application to WPB on Form PD-609 outlining the end use of the material. The essentiality of this end use determines the allocation of the nitrocellulose. Beginning October 1, non-essential uses were curtailed by WPB, and it is expected that this curtailment will gradually increase to such an extent as to practically eliminate all non-essential uses for nitrocellulose within the near future. This curtailment is caused through the necessity of conserving nitric acid for direct and indirect war uses.

Ethyl Cellulose

The ethyl cellulose Conservation Order M-175 covers the procurement of this material under Form PD-550, which has to be submitted to WPB by the ethyl cellulose consumer. At the present time all available ethyl cellulose is being consumed for direct and indirect war uses, thus leaving no material for industrial and civilian uses. This restriction is caused by the limited productive capacity in the country for ethyl cellulose.

Cellulose Acetate

This is controlled by the Thermoplastics Order M-154, and at the present time very little of this product is being used for non-essential purposes. Some manufacturers are not operating at full capacity because of the inability to obtain sufficient acetic anhydride.

Chlorinated Paraffine

On August 10, chlorinated paraffine was placed under allocation Order M-189. The procurement of this material is obtained from the Chlorine-Alkali Unit of WPB by application on Form PD-619. At the present time there is considerable additional capacity beyond actual allocation, so there is a substantial surplus available, but, of course, only on allocation.

Naval Stores

It is expected there will be sufficient rosin and turpentine to take care of the balance of the naval stores year ending March 31, 1943. It is also thought that even though gum production should be reasonably reduced below the 1942-43 production, there may be enough turpentine and rosin available in this country for the new year. This thought about the availability of supplies includes stocks of turpentine and rosin in the government stock pile or on loan to the CCC bank. It is believed that it is possible that between now and the end of this present naval stores year there will be a decided reduction in stocks of pine oil with the possibilitiy of a tight situation existing and that the demand thereafter during the war period may be greater than the production.

Driers

There has been no change since the last report other than Order M-142 which places naphthenates under complete allocation as of October 1. There are sufficient naphthenates to take care of all government orders. Cobalt metal is also under strict allocation. While the other non-ferrous metals used in driers are subject to priority, there has been no inconvenience in supplying customers with all of their needs for both civilian and government business. The drier industry had the vision to anticipate this, and when naphthenates were allocated were able to substitute so that there was no trouble in making the change-over from naphthenates. In other words, there is no hardship at the present time.

Resins

The synthetic resin picture looks very much tougher than it did before, due to the military requirements for phenol, phthalic anhydride and glycerine, so that there will not be much available for orders carrying low priorities.

Natural resins of certain types are getting very much scarcer, and from those countries that are closed up we will get no more. The only country open is the Belgian Congo, from which there is quite a quantity available and shipping space to bring it over here.

There is a quantity of ester gums available which had already been made up before any of the orders controlling glycerine were issued.

Reaction is that synthetic resin for civilian use is going to be practically out of the picture. Will tighten up now. Government ordering huge amounts.

Containers

See convention papers on Containers (Hoffman and Kiefer).

Critical Materials

In his paper on "The Control of Critical Materials," Dr. D. P. Morgan, deputy chief of the Chemicals Branch of WPB, went into the theory of allocations. The essence of any allocations program, he said, involves the problem of providing the military forces with all the materials necessary for the war effort and at the same time providing for proper control of critical materials. Complications arise, he pointed out, from the fact that formulation of plans must proceed simultaneously with an all-out effort to put them into effect; it is as though a man had "to make a vitally important trip in the car and at the same time take it to pieces to find out what makes the wheels go round."

In a prolonged period of feverish activity, Dr. Morgan believes that progress has been remarkable in view of the obstacles met. His paper was an analysis of several systems of allocation: complete, horizontal, vertical and the block budget plan. He felt the need of a system that will work effectively both vertically and horizontally and considered that perhaps "the many different plans now under consideration will be fused into a single plan combining the best features of complete allocation, of PRP, of the warrant system and of the block budget scheme." Whatever develops, he said, will be of utmost significance to the paint, varnish and lacquer industry.

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Dr. D. P. Morgan

Analyzed Theories of Allocation

Dr. Morgan's analysis of allocation theories follows:—

Complete Allocation

Originally there was only a single use for the word "allocation." This was 'way back in 1941 before the NDAC had evolved into OPM, and the OPM into SPAB, and SPAB into the WPB. Veterans who have survived these metamorphoses will tell how the word "allocation" initially had only a single meaning in the defense program, namely, the assignment of such and such a poundage from so and so's production to a particular customer. This was the procedure followed in parceling out aluminum and synthetic rubber which were among the first products to be brought under allocation. The same procedure with modifications is still followed in

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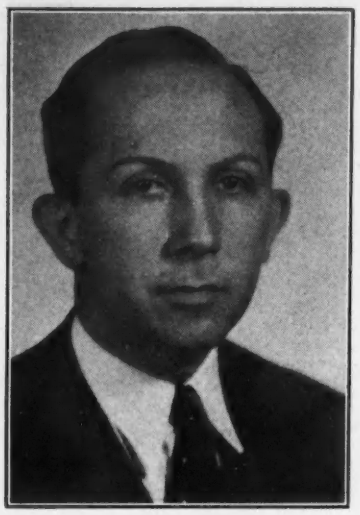

Frank A. Pratt
Southwestern Zone Vice-president

controlling the distribution of many products in the chemical field. In fact, the Chemicals Branch has issued over fifty allocation orders and has made quite a specialty of this very positive method for dealing with problems of distribution where the supply is inadequate to fill all requirements.

Briefly, a typical allocation of the foregoing type is so handled that the administrator, in making his decision of how many pounds each producer is to supply to each customer, has before him each month a very complete picture of the total requirements. The total supply is broken down by producers and the requirements by customers who in general are called upon to stipulate the products to be made from the raw material under allocation and its end use. With this information and additional information about preference ratings, it is possible to sort out the wheat from the chaff. The available supply can then be distributed so as to take care of the more essential requirements.

This type of allocation, which, for the purposes of this article, may be called complete allocation, has the great advantage of being positive and direct. However, it becomes burdensome to operate where the number of producers or customers is extremely great. Fortunately, it is a characteristic of the chemical industry that many scarce items are made by only a few producers and distributed to a few dozen customers. Where there are hundreds of producers and thousands upon thousands of customers, the paper work involved in complete allocation becomes burdensome. Still, there are devices for overcoming this deficiency. For example, it is possible to allocate only to tank-car customers without disturbing the small-order customer who uses a few drums a month or less. Again, it is possible under certain circumstances to have the manufacturer who uses the product under allocation classify his customers, thus saving paper work in Washington.

Another complication in complete allocation is that corrolation is necessary between allocations of different materials needed to make the same product. There are, however, two answers to this; first, the scarcest material prevails and overbuying of other materials will show up in the inventory report for the following month; again, much can be accomplished by close contact between the administrators of the various orders involved.

An objection to complete allocation which is sometimes raised is that it places a heavy responsibility on the shoulders of the allocator. The man for this position must be chosen with great care in order to avoid a possibility of bias, bribery, or corruption. However, in the experience of the Chemicals Branch, this objection has been overcome. it is believed, by the institution of a thorough and adequate review prior to the issuance of the allocations. This review is carried out by one or more of the officers of the branch.

There are those who believe that complete allocation should be used more extensively. Those who have had the most experience with this procedure have great confidence in it and believe it could be applied with modifications in the most complicated fields. To be sure, it might not be possible to allocate all steel from the ingot to the fabricated part, but there are those who contend that the steel industry could be brought under allocation successfully and efficiently by the employment of a sufficient number of sub-allocations, just as similar complex situations have been solved in the chemical field.

Horizontal Allocation

The term "horizontal allocation" might be applied reasonably to complete allocation in which the total amount of the material under control is distributed horizontally across the board each month to all the different types of consumers. Actually, the term has been applied to the type of allocation which is being carried out under the Production Requirements Plan. The reason for this is because the Production Requirements Plan, which is set up to balance all the requirements of each manufacturer at a particular level in the economy, effects a horizontal type of allocation. Thus, to the extent that all Class I manufacturers of nuts and bolts are under the Production Requirements Plan, there is a horizontal allocation of the product of this industry all across the board in whatever fields it is used. A balance is effected through the control of the raw materials requested on the quarterly PD-25-A application form. A vertical component is introduced by requiring a pattern of customer's ratings but, this is only as dependable as the priority system—a serious limitation.

Originally, it is understood, the proponents of allocation under the Production Requirements Plan intended to keep a running tab of every single requirement for each raw material granted in all the PD-25-A application forms submitted. As everyone knows, it soon developed that this was an immense problem fraught with many difficulties. In consequence, in the fourth quarter the effort was confined to a half dozen raw materials of especial importance. It is too soon to say how successful this effort will be, but it is evident already that great difficulties are involved for both industry and the War Production Board.

One of the most serious difficulties arises from the fact that the plan is too involved to operate on a monthly basis. Consequently, applications are required only once each quarter. Since the tabulating and processing of these forms take a long time, it was necessary to have the applications for the fourth quarter submitted early in August, which meant that the manufacturer had to make his estimate, sometime in July, of what he was going to use in October, November, and December, which is very far in advance in war time. Under the circumstances, the need for interim adjustments is obvious and such experience as is available indicates that some of these adjustments will be extremely troublesome.

Vertical Allocation

The preference rating system as originally conceived was a simple case of partial vertical allocation. According to this system as it was first applied, the prime contractor was given a preference rating which he was entitled to extend to his sub-contractors. Consequently, as long as all the raw materials were plentiful and as long as he held the highest priority rating, the prime contractor was assured a preferred position in the delivery schedule of his supplier. Unfortunately, as the program expanded, so many of these priorities were issued that this form of currency was debased and even a rapid and progressive inflation of priorities failed to maintain a preferred position for the more important programs.

More recently, a modification of this original scheme has been developed which is called the "warrant system" or contract production control. This scheme, which has been tested on a number of radio companies, provides that the prime contractor submit a bill of materials at the time when his contract is negotiated. Then, when the contract is signed, he is given a warrant for every pound of material that is required to fulfill that contract. In effect, to the extent that this system is carried from the top to the bottom of the production flow chart, it constitutes a new type of vertical allocation. It is believed that it is this type of device which is under consideration when reference is made currently to "vertical allocation."

It is understood that the proponents of this plan are well satisfied with the results of the initial tests. However, it is to be observed that the real difficulties in any plan are not encountered until so many programs are brought under it that the supply of some of the materials required is completely used up. To illustrate, the amount of steel required in the radio program would scarcely make a ripple on the surface of the national economy. However, if the warrant system or contract production control were introduced in the tank program and in the airplane program and in the ship program and in the various other programs consuming large quantities of materials, a situation might be reached eventually in which the supply of certain essential materials would give out. The result might be that no more contracts could be signed or if some particularly important new program were initiated it would be necessary to go back and rescind some of the contracts already outstanding. If this happened to any great extent, it might be necessary to rescind a great many contracts.

It is not clear how this deficiency of an extended application of the warrant system can be avoided even if complete statistical knowledge, both vertical and horizontal, were available. According to the nature of things, it is not possible to hold up signing a great number of prime contracts until the requirements as indicated by the bills of materials can be added together for each of the multifarious items involved. Yet, unless all the statistics are in good order, the signing of thousands and thousands of contracts in succession as they happen to come along may result in a state of confusion unless the application of this system is carefully thought out in advance.

Block Budget Plan of Allocation

The intent of the block budget plan is to provide both vertical and horizontal elements. The vertical component is contributed by charging the army, navy, etc., having programs utilizing steel, for example, with the responsibility of obtaining bills of materials on this particular metal. The sum total of these bills of materials yields the aggregate requirement for steel of a particular program from the ingot through each successive stage of production down to the finished tank or battleship. A further refinement is to schedule the requirement of this steel by months for a period of months in advance. The horizontal component comes into the picture when the metal budgets of a number of different agencies for a number of different programs are submitted to the Requirements Committee where they are totaled across the board. They compare the sum of all requirements for the metal in question with the available supply.

At first glance the block budget system appears to be the final answer to the problem. However, it remains to be seen how the details are to be worked out. It is understood that quite a large number of different plans have been submitted which must be considered in arriving at the ultimate selection. Judging from general comments, the final plan may include a modification of the production requirements plan to take care of the type of company that makes nuts and bolts where other forms of allocation are not readily applicable. Another feature of the plan will probably be some form of vertical scheduling similar to the contract production control, mentioned above, now being tried on certain radio companies. In conjunction with this latter feature, it is probable that the budgeting of blocks of certain critical metals to the army, navy, etc., in terms of their principal programs, will be required.

Where the supply is inadequate, the requirements committee will cut the requirements of certain agencies to restore a balance. Then block allocations of the metal will be made to each agency, which will be held responsible for not exceeding its quota. Under this system, it is inferred, the approved needs of a particular agency will be made obtainable by warrants or similar authorizations. Such authorizations will then be honored by the administrator of the allocation of the metal in question.

Priorities and Allocations

Coming closer to grips with priorities and allocations as they bear on the paint, varnish and lacquer industry, George H. Priest, Jr., priorities consultant of the association, devoted his paper chiefly to two pertinent phases of the over-all problem: the Production Requirements Plan and the matter of questionnaires and report forms, in the simplification of which the association has played an important part.

Mr. Priest went back to the Chicago convention a year ago to trace the development of the priorities system under Regulation No. 1. He recalled that at that time there were about 50 M orders, controlling the distribution of materials; now there are close to 250. At Chicago, there were also about 50 P orders, assigning blanket ratings; there are now close to 150. Of the L orders, limiting production in industries normally consuming large quantities of materials required for the military program, the half dozen a year ago have increased to about 200.

Observing that "on the whole our industry is still in a relatively favorable position with respect to materials" and that the association headquarters would continue to advise the industry regarding new orders and amendments as well as to answer pertinent questions, Mr. Priest then took up the two subjects which, he said, had been the cause of repeated inquiries. He wrote:

Production Requirements Plan

So far the members of our industry are concerned, the Production Requirements Plan may be aptly described as a problem child. At times it has shown great promise and at other times it has been loathsome. It has beckoned alluringly and then slapped us down, then regained our interest by a disarming display of that "come-hither" look. It has been optional, mandatory, then optional again. It has undergone so many changes that we scarcely recognize it today and have no idea what it will look like tomorrow—it is quite possible that we may no longer have even the option. However, we are advised by the War Production Board that there are about 350 members of our industry operating under the Production Requirements Plan in the current period (the fourth quarter of 1942) so that it does appear desirable to discuss its turbulent course.

A year ago a very few members of our industry were operating under the Defense Supplies Rating Plan. In those days we were talking about "defense" and preference ratings were assigned manufacturers to assist them in obtaining prompt delivery of materials required to enable them to fulfill their own part in the defense program. The priorities system had been in force for only a very short time when it became evident that some means was necessary to insure delivery of materials in advance so that a manufacturer could start work immediately upon receiving a defense order instead of waiting until after the offer had been placed with him before entering a market already flooded with preference rated orders.

So it was provided that a manufacturer could analyze his sales over a three months' period to determine the percentage of his defense business, that is, what percentage of the whole, dollar-wise, carried ratings of A-10 or better. And if, for example, he could show 35 percent defense, he was permitted to apply an A-10 rating against 35 percent of his purchases during the next ninety days.

That, of course, soon proved inadequate, and the Production Requirements Plan was originally devised to supersede the Defense Supplies Rating Plan and to assign ratings which, based on his past experience and anticipated future requirements, would cover the entire scale of his operation. That is, a series of ratings were assigned with the highest relating to his direct participation in the war effort and the lowest enabling him to carry on his civilian business to the extent that the necessary materials were available and could be obtained at this level of the rating structure.

Early Workings of PRP

Announcement of PRP was made early in December, and manufacturers who wished to take advantage of it were required to file the PD-25A application which involved two sales analyses, one according to preference ratings and the other according to end use. They were also instructed to indicate their anticipated requirements of each of the materials listed on the materials list accompanying the application, also containers and maintenance and repair items.

During the first few months of the year (1942) we received many inquiries concerning operation of the plan, but about all we could say was that those of our members who were operating under it apparently liked it and further that it was something to watch because it had been suggested that after the routine had been established at the War Production Board operation under the plan might be made mandatory so that it was highly desirable that members familiarize themselves with it and make certain that their records were kept in such a way that they could supply the necessary information, particularly with respect to end use of their products, at any time it might be called for.

There were two fairly obvious defects. The first was that the quantities of each material which might be purchased with the assigned ratings were specified upon the PRP certificate and that these ratings were applied horizontally against

Oliver S. Orrick
Western Zone Vice-president

each material purchased. That is, a manufacturer might be privileged to apply a rating of A-1-a against 35 percent of his purchase of a certain material which was so scarce that it could not be purchased with an A-2 rating. It might be that this particular material was used altogether, that is, to the extent of 100 percent, in filling top military orders, so that his certificate enabled him to buy only 35 percent of what was absolutely necessary. Then, too, after having indicated his anticipated requirements to the best of his ability, he might receive additional military orders for which the total quantities of material specified upon his certificate would be entirely inadequate. The PD-25F interim report was designed to take care of these emergency situations, and during the first six months of the year it worked fairly well.

To the vast majority of the members of our industry PRP did not become a reality until about the first of June when it was officially announced that operation under PRP would be mandatory for Class I producers in the third quarter. A Class I producer was defined as one consuming in a calendar quarter five thousand dollars worth of metals in the forms included on the metals list attached to the regulation. This list at that time included among other nonferrous compounds white lead, zinc oxide and titanium dioxide, and accordingly several hundred paint manufacturers were faced with the necessity for filing the PD-25A application and operating under PRP during the third quarter.

There were upon the materials list accompanying the PD-25A form several hundred chemicals, including most paint-making materials. Several of these were already under allocation, meaning that they could be purchased only on specific authorization based on end use, and some others were moving in this direction. Accordingly, more and more emphasis was placed upon end use and paint manufacturers were required to furnish supplementary information not originally called for to indicate the amount of each material required for each end use. This was the first cross they had to bear.

Unwitting Violations

Then, because WPB had apparently greatly underestimated the number of additional producers who would be brought under PRP by the mandatory provisions of Priorities Regulation No. 11, it developed that the existing staff was entirely inadequate to process the thousands of applications from manufacturers in all types of industry which were received. Estimated requirements were arbitrarily cut by a mathematical formula with the result that when their certificates were received many manufacturers found that they had already violated the provision limiting their purchases of any material to the quantity specified upon their certificates. Others received orders which they had no way of anticipating and which had not entered into their calculations and because of this provision they were unable, without violating the law, to purchase materials which were readily available in the open market and which manufacturers who were not operating under PRP could purchase without any preference rating assistance at all. Both these situations called for filing a PD-25F but whereas previously these had been handled in a matter of two or three days it now became, because of the large number of them that were pouring into Washington, a matter of two or three weeks, or even more.

This very unsatisfactory condition was eventually corrected, largely through an amendment to Priorities Regulation No. 11 which provided that manufacturers could purchase without regard to the quantity specified upon their certificates any materials not under allocation which could be purchased without preference rating assistance. Of course materials under allocation can be purchased only upon individual application and specific authorization, while ratings are obviously unnecessary for the purchase of materials which can be purchased without them.

We have frequently been asked for a list of materials which can be purchased without preference rating assistance but WPB has published no such list. There is only one test that can be applied and that is to place an order with the supplier. If he can fill it without a preference rating certificate that's all there is to it, but if he is unable to do so, he will insist upon the preference rating before accepting the order.

Hardships Encountered

This amendment greatly alleviated the situation, the seriousness of which is indicated by the fact that one of our members, with a volume of about three hundred thousand dollars per year, who prior to being brought under PRP in the third quarter had not had occasion to apply preference ratings in the purchase of more than a hundred dollars worth of materials, found himself bound by the quantites specified upon his certificate so that he was unable to buy the materials required to fill rush orders on rapidly expanding military projects. Letters, wires, and even telephone calls could not cut through the red tape to obtain permission to buy materials which were available to anyone not so bound without any preference rating assistance whatever.

At the beginning of the third quarter a separate PRP unit was set up in the Chemicals Branch to process the applications of paint manufacturers and others coming under the general supervision of the Chemicals Branch. There was at first some confusion because before all the records were transferred to this new unit it was impossible at times to locate certain cases and appeals would sometimes get into the wrong hands. That was ironed out in a minimum of time, however, and the number of PD-25Fs was cut down materially by the amendment mentioned so that the handling of those which did come in was greatly facilitated.

But while this was all of great importance to the paint manufacturers operating under PRP during the third quarter there was another amendment, actually issued a few days previously to the one already mentioned, which had even greater significance insofar as operation during the fourth quarter was concerned. While operation under the plan was still made mandatory for Class I producers, and the definition of a Class I producer was unchanged, the metals list attached to the amendment was changed by the elimination of two paragraphs, one of which included the white lead, zinc oxide and titanium dioxide which had brought paint manufacturers under the mandatory provisions of the regulation. Accordingly, this change in the metals list had the effect of making operation under the plan in the fourth quarter optional, instead of mandatory, for most paint manufacturers.

At the same time a new and simplified PD-25A form was issued for use in making application for operation under PRP during the fourth quarter and the materials list was revised with the complete elimination of the several hundred materials previously listed as chemicals and the substitution therefor of the single designation "chemicals," to be recorded as a single dollar value figure.

In advising paint manufacturers of this new form and their changed status on August 1, at the request of the Protective Coatings Section we stated that supplementary instructions would be issued for their use in connection with this form. These were forwarded on September 11 and asked manufacturers to indicate their anticipated requirements of materials, not under allocation and which could be purchased only with preference rating assistance, entering into four groups of end use as indicated in the schedule attached to the instructions. We were then informed that preference ratings would be assigned to assist in the purchase of materials for these four respective groups of end use.

Further Simplification

Because of the large number of applications already on file and to avoid the delay involved in assembling this additional information, further simplification was effected over the week-end, and on September 15 we were informed and so advised the industry that this additional information would not be required, that manufacturers who had already filed need do nothing but wait for their certificate, while those who had not filed and wished to do so should follow the instructions enclosed with our letter of September 11 as modified by our letter of September 15.

The intent then was that ratings would be assigned which it would be the responsibility of the manufacturer to see were applied against the purchase of materials only as they entered into the four respective groups of end use. But there was still further modification in store. Because of a general revision and simplification of the priorities system, and because it was recognized that the highest PRP rating heretofore assigned, A-a, would be inadequate to obtain materials required to fill orders accompanied by some of the new AA ratings, instructions were issued to all units processing PD-25A applications to assign ratings in the AA series. Accordingly, while the instructions for paint manufacturers have not been altered, there has been a realignment of the four groups of end use into three as a matter of procedure within the War Production Board itself and the ratings now assigned paint manufacturers operating under PRP range from AA-1 to AA-5 with a special AA2x for use in connection with maintenance and repair items.

There has been some confusion concerning the option attached to the fourth quarter certificate whereby PRP units are granted permission to extend ratings accompanying orders placed with them for other than listed materials provided the PRP unit advises WPB that it will make use of extensions exclusively for this purpose in lieu of applying the ratings assigned by its PRP certificate. For the purpose of estimating their fourth

GRP

SHELLAC

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We are proud of our record as SHELLAC importers and suppliers during the difficulties of 1941-42. Not only have we satisfied the needs of our customers but in addition have been able to supply the United States Navy an enormously increased quantity of SHELLAC running into millions of pounds. Had we not been able to satisfy the Navy requirements, we believe the government would have found it necessary to adopt the present strict regulations at a much earlier date.

Conservation of stocks is vital to our war effort, but we have SHELLAC which is available for military, naval, and essential civilian use, subject to governmental release.

NATURAL RESINS are unrestricted as to usage other than in barn paints, freight car paints, and with some exceptions, road-marking paints. We have limited stocks of Far Eastern types, supplies of which are no longer obtainable, also substantial quantities of the Congo assortments, the importation of which still continues.

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FACTORY: JERSEY CITY, N. J.

George H. Priest, Jr.

Told of PRP and Questionnaires

quarter requirements, paint manufacturers have been advised that all materials entering into the composition of their finished products which do not appear separately in the materials list as revised, are to be considered as chemicals. Priorities Regulation No. 11 as amended defines a listed material as one which appears and is given an item number on Materials List No. 1 revised, or required to be separately listed by supplementary instructions from the War Production Board.

Since no item number is given to "chemicals" on the materials list, and since for the purpose of operating under PRP paint manufacturers have been advised that all except a very few materials separately listed are to be considered chemicals, it appears that practically all of the paint manufacturers' purchases of materials will be of the unlisted variety and that accordingly the paint manufacturer has the choice of applying the ratings assigned to him or extending those attached to his customer's order. That looks almost like exercising an option to operate under PRP and then exercising another one to escape it.

Individual Decisions in Order

There are two thoughts in this connection, however. First, if he wishes the manufacturer may elect to extend ratings instead of applying those assigned to him for the purchase of materials, and at the same time retain the AA-2x assigned for the purchase of maintenance and repair items; the requirements committee, incidentally, is making its allocations of metals for maintenance and repair solely on the basis of aggregate totals indicated by the PD-25A applications which are filed. The other is that he should weigh the relative value to him of ratings which enable him to buy materials in advance against those which he can use only after they have been served upon him by a customer and which may involve the serious difficulty of recording and extending ratings on multitudinous small orders. There is no general recommendation which can be made. Whether a manufacturer will elect to use his PRP ratings or to retain his AA-2x for maintenance and repair and extend the ratings attached to his customers' orders for the purchase of unlisted materials must be a matter for individual determination based largely on the PRP ratings assigned upon his own certificate. If he has even as much as 10 percent AA-1 he may be in good shape but if it is all AA-5, he may be better off to extend his customers' ratings as the whole ratings structure is being inflated and the chances are that his customers will have at least some ratings higher than the AA-5. Or, considering that his application may have been filed two months ago, if the nature of his business has changed and he feels that the ratings assigned do not accurately reflect his present needs, he may use the PD-25-F with a covering letter to request reratings.

Because these comments are being brought to you through the medium of printed word instead of in person at our Convention-at-Home, you will understand that it has been necessary to prepare them in advance and that at the rate changes are being made these days it is quite possible that some action may have been taken by the War Production Board in the meantime which will involve further modification of PRP. It has been suggested that its scope may be greatly circumscribed, to include only a limited number of industries working primarily with metals, but that smacks of prophecy and so far as the first quarter of 1943 is concerned, it may be best to sit tight until things settle down a bit. We shall be in close touch with PRP and the Protective Coatings Section for instruction which will be conveyed to members of the industry as soon as they are forthcoming.

Questionnaires and Reports

Many members of our industry have complained, and with justification, of the increasing burden placed upon them by multitudinous questionnaires and report forms emanating from government agencies in Washington. Of course this situation has not been peculiar to our own industry, but has pervaded industry generally and steps were taken to correct it during the past summer with the appointment of a War Production Board Committee for the Review of Data Requests from Industry.

This committee is headed by Joseph I. Lubin, and was assigned the task of reviewing all data requests, eliminating the unnecessary, improving the unfit, and, in general, coordinating the entire system of reporting to the War Production Board. In discussing the work of his committee recently Mr. Lubin said:—

"The War Production Board has long recognized that the number and variety of data requests flowing out to industry have constituted a serious drain on the time and energy of business administrators and their staffs. The rapid multiplication of the war agencies and the unprecedented expansion of their functions have led to a mushroom growth in the forms, reports, questionnaires and other official paper. Many are necessary to the effective performance of the work of the war agencies. Because of the character of their growth many duplicate in part information already available on other forms. Some have not been as carefully prepared as others. Some require information which it is either impossible or unnecessarily burdensome for industry to furnish. Some clearly serve no useful purpose whatsoever."

Early in July, soon after his appointment, Mr. Lubin asked Mr. Trigg to criticize existing forms, with particular reference to those issued by the Chemicals Branch, of which the Protective Coatings Section is an integral part. Mr. Trigg enlisted the cooperation of a small group including representatives of our own industry, the general chemical industry, and the Chemicals Branch of WPB. Certain policies were defined and a sub-committee met almost daily over a period of two weeks in preparing recommendations for Mr. Lubin's guidance. Then followed a meeting with Mr. Lubin at which differences between the representatives of industry and the War Production Board were ironed out and the result was two new standard forms, PD-600 and PD-601, for use by consumers and suppliers, respectively, of all chemicals placed under allocation by the Chemicals Branch. These two new forms, which are now in use, replaced 48 in use at that time, and as many additional chemicals have been placed under allocation since, their adoption has eliminated the introduction of a considerable number of new forms.

Industry Recommendations

Our industry committee also made certain recommendations in connection with the Production Requirements Plan and the PD-25A and PD-25F forms used in connection with it and these recommendations were undoubtedly reflected in the modified and simplified PRP procedure as it affects members of our industry and also in obtaining the amendments to Priorities Regulation No. 11 which made it possible for PRP producers to purchase without restriction in the open market any materials which could be obtained without preference rating assistance.

In the course of our deliberations, we wrote to fifty or sixty representative paint manufacturers, telling them what was going on, and asking for specific recommendations supported by factual information rather than general complaints. We did this rather than circularizing the industry at large because experience with our industry committee was proving how difficult it was to crash through the fog to a particularly vulnerable point of attack. Some of the comments received in reply to this letter may be interesting.

"Unless one knows fully the objectives of the War Production Board, you cannot very well set yourself up as an authority and make suggestions to them. One particular criticism, if it is a criticism, is that we are asked to make too many reports, many of them of a similar character."

"We do not know how they (WPB) use the information or what it is worth in many instances, and for that reason we are not in a position to judge as to its value. We are all agreed though that we have too much of that work to do or have been accustomed to in the past. We are doing a lot less business and almost twice as much work per order."

These comments tended to confirm the impression of our committee that the actual simplification of WPB forms is largely an internal matter which requires careful attention and study to determine what type of information is essential and how it can be obtained without duplicating other forms of introducing a lot of extraneous material. Accordingly, at Mr. Lubin's request, we arranged for a competent industry representative to spend a period of three weeks with him in his office and subsequently the same type of cooperation was extended by about twenty other industries.

Lubin Committee Continued

It was originally contemplated that the work of the Lubin Committee would be completed within about three months' time, but the progress made has been so gratifying that in response to requests from industry, the life of the committee has been extended to December 31. Thus far, more than 120 forms formerly used by the War Production Board have been abolished and an additional 130 have been simplified. In addition, the committee has standardized the format of other forms so that with only a few exceptions (and these are slated for revision) all of them will now fit a standard typewriter, and nearly all of them are of the standard 8½ by 11-inch size.

All approved forms which have been issued or reprinted since August 31 have a Bureau of the Budget serial number and expiration date on the upper right-hand corner of each copy. As supplies of current forms issued prior to August 31 are exhausted, they will be reprinted with Bureau of the Budget symbol and serial number, and no form which does not carry such serial number and an expiration date need be filed after December 31, 1942, and no form carrying an expiration date need be filed after such date.

While this discussion has dealt primarily with WPB forms and the work of the Lubin Committee, it is nevertheless a fact that questionnaires and report forms issued by OPA and other government agencies must also be authorized by the Bureau of the Budget. Every precaution will be taken to see that the information requested is essential and that there will be no duplication in the form of requests for information which is already available elsewhere. Further, it will be provided in Bureau of the Budget Circular Number 360, Supplement 1, that all government forms approved by the bureau must show the serial number and expiration date after December 31, 1942.

Protective Coatings

The government's approach to the problem of critical materials and allocations was presented in a paper by E. H. Bucy, Chief of the Protective Coatings Section of WPB, who told of the growth in the last year from an "embryo of a few people handling a wide variety of commodities and raw materials to an organized group in which each industrial specialist is responsible for materials with which he is familiar." The present scope of the section, the functioning units and personnel are set forth in the adjoining list.

The Protective Coatings Section, Mr. Bucy wrote, has a dual responsibility, "the first of which is to see that the army and navy and all other vital war agencies receive all the protective coatings which they require; the second of which is to see that the supplies of those products continue to flow in such fashion that there will be no slowup or delay in supplying the necessary products to the armed forces." Certain of the section's units deal with raw materials and must see that they are available in sufficient quantity, while other units are so-called "end use" units and handle finished products. The latter, he explained, advise the raw materials units on raw materials problems and also handle all general industry probems, such as equipment, containers, transportation and others.

In addition to the ceaseless activity of the section to assure to the war effort an adequate supply of all raw materials and finished products falling under its jurisdiction, Mr. Bucy pointed out that there is continuing cooperation between the section and all other sections or branches of WPB in connection with the interrelationship of interest. Materials which are raw materials for the paint industry may be the finished product of another, and most of the pigments and resins stem from chemicals or metals which in turn are handled by other sections. Also, OPA, BEW and the War Shipping Administration are continually confronted with problems which have to do with products handled by the Protective Coatings Section. Hence, said Mr. Bucy, "we must keep a continuing up-to-date knowledge of the materials which we handle while, at the same time, advising and consulting with dozens of other sections of WPB as well as agencies which have no connection with the board."

Mr. Bucy continued:

Basic Change in Policy

A good example of the work carried on by the section is illustrated by the greatest basic change in the War Production Board policy during the past year. We have in mind the shift from the so-called priorities system, based on ratings, to the present method of direct allocation of materials. Difficulty in the past has been experienced with the priorities system due to the fact that under that system, there could be no

Protective Coatings Section Personnel

INDUSTRIES REPRESENTED: Paint, Varnish and Lacquer Coated Fabric and Paper, Printing Ink, Pigments and Colors, Aluminum Paste and Powder, Natural Gums and Resins, Synthetic Resin for Coating Use, Naval Stores, Nitro and Ethyl Cellulose, Aromatic Petroleum Derivatives, Naphthenic Acid and Derivatives, Shellac.

CHIEF OF SECTION: E. H. Bucy.

DEPUTY CHIEF: Wells Martin, Chicago. (These men are assisted by industrial specialists charged with immediate responsibility for various materials handled. They are divided into five separate units.)

PAINT, VARNISH AND LACQUER UNIT (Under personal supervision of Mr. Bucy and Mr. Martin): B. M. Belcher, Greenwich, Conn., Chief. He also handles trade sales, structural and marine paints. Consultant for this group, A. C. Goetz, Cincinnati. Industrial finishes, C. M. Rice, Cleveland; D. M. Gray, Pittsburgh, consultant. Water paints, W. W. Barnard, Boston; J. V. Reardon, St. Louis, consultant.

PRINTING INK UNIT: T. J. Craig, Caldwell, N. J., Chief; G. L. Erickson, Cleveland, consultant.

COATED FABRICS AND PAPER UNIT: P. F. Corbin, Toledo, Acting Chief; H. B. Slusser, assistant; W. Masland, Philadelphia, consultant.

PIGMENTS AND COLORS UNIT: Thomas J. Starkie, New York, Acting Chief; C. H. Love, Easton, Pa., Assistant Chief; G. Bangsberg, assistant; S. L. Karpeles, Glens Falls, N. Y., consultant; C. M. Luke, Washington, analyst for aluminum paste and powder.

ASSOCIATED MATERIALS UNIT: Coleman Caryl, New York, Chief; E. C. Wood, Washington, and Dexter Lewis, Providence, R. I., assistants on natural gums, natural resins, shellac and naval stores; G. H. Peters, Rhinelander, Wis., assistant, and J. B. Wiesel, Wilmington, Del., consultant, on ethyl cellulose and nitrocellulose; Harry Howard, East Orange, N. J., assistant on aromatic petroleum solvents, naphthenic acids and derivatives. (Synthetic resins for coating use also are under this unit, which works in close cooperation with C. M. Rice, of the Paint, Varnish and Lacquer Unit.)

STAFF OF STATISTICIANS AND ANALYSTS: Headed by Dr. W. A. Nyland, Brewster, N. Y., general section consultant; Dr. W. B. North, Orange, N. J., general section analyst; and Joseph A. Hager, of Grand Rapids, Mich., general business consultant.

knowledge of or control over the end use to which a commodity was put.

As materials have become tighter, the need for distributing such critical materials to the more essential end uses has become more necessary. Under the old method of priority ratings, a paint containing very critical materials such as Chinawood oil or phenolic resins, could be used on the surfaces where the use of such critical materials was not warranted, simply because a very high rating might have been extended on the order which was issued to obtain the material. Gradually, it was realized that many critical materials were being wasted in this fashion and that real control must come through direct allocation to end use.

It is the thinking of this section that raw materials fall into three general classes:—

(1) Those that are free; that is those that may be purchased without a priority rating.

(2) Those that are approaching the critical stage.

(3) Those which are critical as to supply for military use.

Raw materials which are free can be obtained without priority assistance and should be obtained in that fashion. Raw materials which fall in that classification between free and critical can be obtained under the Production Requirements Plan, or through the medium of PD-1a and similar applications. Critical materials are and must be on direct allocation, and, as already stated, allocation to end use. By end use, we wish to emphasize ultimate end use. To say that castor oil is to be used for artificial leather is not enough. One must specify artificial leather in turn is to be used for; for example, book bindings or aeroplane seat coverings. As material becomes more critical, the necessity for knowledge as to specific end use becomes more necessary. Only in this manner can allocations be made intelligently.

Problems in Direct Allocation

Direct allocation presents many problems for the Protective Coatings Section. Several of the materials which we handle are under direct allocation. This means not only that hundreds of PD-600 applications must be reviewed by us each month, but also that we in turn must go through a great deal of groundwork before we can make recommendations regarding allocation. A material which is recommended for allocation by this section may consist of several raw materials which in turn are recommended for allocation by other sections. Those raw materials may go into the commodity which we handle as well as going into many other commodities. As a consequence, all units and sections of the War Production Board which are interested in the materials involved, must first get together and decide how these materials shall be split up according to industry.

After the various units or sections have determined how much of a given material will be available for the industries which they handle, the Protective Coatings Section must in turn decide what allocations to recommend for the various end uses which are presented to us. All this calls for timing and cooperation both in the War Production Board and between the War Production Board and industry. If you are applying for a material which is on allocation, you must have your applications in at the time called for, and you must be specific regarding your end use.

We recognize that this question of allocation presents a major problem, both for the Protective Coatings Section and for industry. We also recognize that the industry is going to be faced with many serious problems during the months to come. We in the Protective Coatings Section are cognizant of those problems and we shall do all within our power to make the industrial path as smooth as possible, in order that industries under our jurisdiction can continue to function and supply the war effort with the products which they manufacture.

We are aided immeasurably in our work by our Industry Advisory Committees. We now have functioning the following Industry Advisory Committees:—Paint, Varnish and Lacquer; Paint, Varnish and Lacquer Technical Advisory; Marine Paint; Titanium Pigments; Carbon Black; Shellac; Pyroxylin and Vinyl Coated Fabrics; Oleoresinous and Tower Oil Coated Fabrics; Printing Ink; Printing Ink Technical Advisory; Earth Colors; and Chemical and Organic Pigments.

Others are being formed for other industries or segments of industries which are within the scope of this Section.

It is our feeling that with the aid of the Industry Advisory Committees and with the cooperation of industry in general, the Protective Coatings Section will be able to function intelligently and effectually during the trying times which are ahead.

Imported Materials

More scientific advancement in the matter of paint pigments has been made than with paint oils, in the opinion of Colonel George S. Brady, of the Materials, Statistics and Reports Division of the Bureau of Economic Warfare, expressed in his paper, "Imported Materials in the Paint Industry." He foresaw a rare opportunity for great technical progress in the fractionation and reblending of oils to produce individual types of special characteristics, and thus avoid a great deal of waste.

Colonel Brady paid marked tribute to the war efforts of the paint and varnish industry, especially its technical men, and declared strongly that paint and other protective materials were highly essential products in our wartime economy. Colonel Brady wrote:—

Protective Coatings Essential

I believe that you do not have to sell the idea that finishes are not merely ornamental. If you can double or treble the life of a product by protecting it with a paint or lacquer, then you have really given us the equivalent of two or three such products. It takes more than a thousand gallons of paint to finish even a small boat, and every ship captain knows that his paint can is one of his most valuable tools in keeping his ship in efficient working trim. There are innumerable pieces of army field equipment that would have very short life in the rain and mud if they were not protected by good finishes.

As for civilian goods, I believe that it is now more necessary than ever to put adequate protective paint coatings on everything. Whatever is worthy of the expenditure of materials and labor to manufacture during this emergency is certainly worthy of the relatively small additional expenditure of materials and labor for finishing to protect its life and usefulness. In homes, offices, hospitals, and factories paints have also become a necessity for health protection, as unpainted or poorly finished rooms, furniture, and equipment lead to uncleanliness and unsanitary conditions, not to mention the morale factor.

This latter is so important by itself that General Marshall is quoted as justifying an extra expenditure of fifteen million dollars on paint for barracks by saying that it would be bad for the morale of the men to coop them up in buildings that looked like lumber yards.

Therefore, it would seem to me that the gauge on the limit of supplies of imported raw materials for the paint industry should be measured by the limits of the manufacture of goods that need paint coatings for their protection, with due regard, of course, to your ability to develop and use substitute materials.

Copals, Damar, Resins and Gums

Normally, your industry obtained practically all of its varnish gums and resins from overseas countries now lost to us, or from remote regions from which shipping is now difficult. This included about 70,000,000 pounds of damar, kauri, and copals, most of which came from Asia and only a relatively small amount from Africa. The quantities which came from Latin America before the war were so small that they did not figure in separate import classifications. As you are well aware, all damar has now been cut off, and the major supply of copals has been lost. The resources of kauri are so limited that it is not reasonable to expect any great increase in this material even if the shipping were available.

There are huge, almost untapped, resources of gums and resins throughout tropical America. Your own laboratory in Washington has tested some of these copal gums and has found them to be excellent varnish-making materials. It will take time, however, to bring about a state of organization of the industry of collecting, and also the standardization and grading. The Amazon and Orinoco valleys, where the gum-bearing trees are most abundant, have very sparse populations, and these people are already largely engaged in producing other materials. These materials often compete one with another. Contrary to general opinion, however, the production of varnish gums is not in direct competition with rubber because rubber is produced in the dry season and gums are obtained in the wet season.

The subject of gum production in Latin America has dragged over a long period of years. I have seen many individual "studies" of the subject, but as yet have seen no plan offered. If the information could be coordinated by your industry and a proposal for action formulated which would take into consideration the relations with other materials, then our own government would be in a position to open negotiations with the Latin American governments for whatever developments that seemed advisable.

★ ★ ★

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Pilot plant operations, successfully conducted over the past twelve months, have now developed into a full-sized plant operation of the Falkolac process.

The wide range of properties of the individual Falkolac types, listed below, show the variety of finishes that may be produced to meet the current government specifications. Write or phone us for complete details.

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Highly polymerized synthetic resins produced from non-strategic materials. They are non-oxidizing, film forming coatings which dry quickly by the evaporation of their solvent. Each has individual properties designed to meet specialized needs.

WHAT THE FALKOLACS DO—

FALKOLAC No. 5—A hard, quick-drying film forming polymer of excellent strength and adhesion. When properly plasticized and pigmented, it forms a base for ammunition finishes of the AXS-684 type, —and together with high ethoxyl ethyl cellulose is suitable for PXS-979 and AXS-680 specifications.

FALKOLAC No. 6—A soft, flexible polymer which may readily emulsified with alkalis such as ammonia, caustic soda and/or amines. Properly pigmented and emulsified, it forms a durable non-oxidizing base for T-1279 camouflage paint. Worthy of mention is its complete freedom from any tendency towards spontaneous combustion.

FALKOLAC No. 71—A tough, very flexible polymer with high viscosity characteristics and rubber-like properties. It is used in conjunction with Falkolacs No. 5 and No. 6 where higher flexibility is required, and with liquid ingredients such as chlorinated paraffine for cloth specifications such as CCC-D-746.

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Prepared at Pratt Institute, Brooklyn, N. Y.
By the Technical Faculty

Konrad F. Wittmann,
Chief, Industrial Camouflage Program

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Paint Oils

When the matter of imported paint oils is discussed, the discussions usually drag out into endless repetitions of already well known facts about tung oils, oiticica, castor, and linseed. The amount of tung oil grown outside of China and the United States is so small that it is a waste of time to discuss it at the present. There are also for the present definite limitations on the quantities of oiticica that you can obtain from Brazil. You know very well that irrespective of any shipping problem, if you could get only one-fourth the annual amount of oiticica that we formerly got of tung from China it would be a big achievement. That amount, added to the domestic American production, would still leave you a gap of at least 60,000,000 pounds to be filled.

The most simple answer, then, lies in filling the gap with treated or synthetic oils. In treated oils I include the products obtained from castor oil, and since the castor bean is a very bulky cargo you must realize that you face a shipping problem there. It seems to me that too much human energy has been expended fruitlessly in arguing about the merits of growing castor beans in the United States. The castor bean, as we know it, is a tropical plant. The plant does not grow large or bear well in colder climates. We failed miserably in trying to grow it in Texas during the last war. We should not be influenced by the propaganda of the local community booster clubs who want to dash in and plant in this state or that state.

It seems to me that the Department of Agriculture has taken the sensible approach to the subject in trying to determine by experiment the varieties that will give commercial yields of oil in the warmer regions of this country. But that will take time to grow the experimental crops. In the meantime you have an immediate oil supply problem to solve.

Some of the greatest technical advances have been made when seeming misfortunes have come along to disturb the pleasant way of life called "drifting." As long as we had ample supplies of tung, castor and linseed we were content to mix these in our paints and call it a day. But that was not progress. It seems to me that we now have an opportunity to push the industry ahead on one of the greatest technical advances that has been made in paint oils. Why should we be content to use linseed and other oils as nature produced them? You know that the characteristics and content of these oils vary widely with differences in soils, climate, variety, and growing conditions. The day will come sometime when the chemistry of paint oils is advanced to the point where we will buy an oil, not by the name of the natural plants, but by the physical and chemical characteristics. Now we have an opportunity to do just that.

In the use of paint oils your industry is in competition with the soap industry, and a number of others. At our present stage of technical-mental development we see good whole natural oils being dumped into soap kettles just to obtain one property and wasting a dozen others. Some of the natural oils contain as high as 15 different glycerides. Some oils that are used in foods contain certain poisonous acids that would serve better if removed and used in the pharmaceutical industry or for other industrial uses. Some of the paint oils have constituents that would serve the greatest purpose if extracted and used in the food or other industries.

The matter of oils should be developed into a great branch of the chemical industry, and the fractionation of oils to rebuild them into products to meet exacting use characteristics should be extended. Let me give one example. Coconut oil contains the capric acid group. These acids are highly valuable to produce plasticizer for synthetic resins, and we cannot get enough of them. When we use coconut oil whole we not only waste these acids, but they are not desirable in the food oils, and they are skin irritants in soap. And we also need the lauric acid to make laural alcohol. This is also wasted. Thus, if the foundation of the oils industry was the fractionation plant we could reblend to form paint, food, and other oils with exactly the characteristics we want. we would then find ourselves less dependent upon certain imported oils because the organic compounds that we need to produce the characteristics can be found in a vast variety of domestic materials.

I recently noted that a certain fatty acid group that we thought could come only from a product imported from the Far East is contained in larger proportions in the oil from a seed that grows profusely in the northeastern states. I am glad to note that there has been a growing interest in fractionation since the beginning of this war effort.

Pigments

The subject of pigments is too vast to treat in detail. I can merely touch on it. My opinion is that it has been handled much more scientifically than has the matter of oils. It has been seen as a more definite chemical problem, and important chemical companies with

Alfred Broun

Col. George S. Brady
Reviewed Imported Materials

good laboratories have had a hold on the problem from the very first. But if you could have heard the arguments offered for importing the natural mineral pigments from the Mediterranean countries and the East, the very same pigments used by the Egyptians and Greeks, 2,500 years ago, you would say that there is still much to be done towards technical advance. I never could see why it was necessary to ask that valuable shipping space be used in wartime to bring red iron oxide ten thousand miles from Ormuz when with a little extra effort we could use the oxides of New Jersey and Pennsylvania.

The development of production of domestic titanium oxide was a case of a well-planned job. The company involved gave positive information well in advance as to what it could produce in a given time, so that it was possible to have several months advance notice to cut down the imports, which had to be brought more than 10,000 miles. Another case which I will give as typical of a good job in its line to fit into the war effort, is that of the direct use of a domestic zinc ore in place of standard leaded zinc. This ore was not being used for other purposes and was brought into emergency paint use to save our strategic zinc even though it gave off-color in the paints. In fact, it was found that because it contained no soluble zinc it gave greater durability in the paints, and that for most purposes the off-color ite would not be objectionable during the emergency.

Perhaps another example of individual jobs well done will illustrate how this industry has and can go forward in maintaining the supply of raw materials. The example I refer to is that of aluminum and bronze paint pigments. Aluminum flake and bronze flake had to be allocated early because of dependence on imported bauxite and copper ores. Normally, when an extender is used to conserve the original pigment there is a considerable reduction in quality of the paints. But it was found that with a large proportion of sericite mica flake the body and flow of the aluminum and bronze paints were improved and the change in color was not objectionable for most uses and was improved for some purposes. The production of mica flake was easily doubled and trebled in the Carolinas as it was plentiful and not a strategic material.

Solvents and Containers

I am not dwelling on solvents for the reason that in general we depend very little on imported solvents. Furthermore, the chemical industry has done a fine job in producing record quantities and in bringing in new materials of wide interchangeability. In regard to containers, the industry had fairly well solved the imported tin problem by doing without tin. But more recently the black plate itself has become a problem which I hope you are going to meet in large part by the use of fiber containers. In this matter of containers the lacquer industry has helped to solve the problems of other industries, notably the food industry, by supplying lacquers that would take the place of coatings, made from imported tin.

Summary

From the materials import standpoint, I believe that we might sum the situation up as follows:—

1. Argentina and Uruguay can supply all the linseed that our shipping people find advisable to transport in 1943. The same holds true of castor beans from Brazil. Some saving in shipping space for castor beans might be attained by turning only to those varieties of beans

that contain the high percentage of oils. The supply of tung oil from China is bound to be very limited unless the military situation changes. Further increases in production of oiticica in Brazil may depend upon its impact upon other materials developments in the northeast regions. You may be sure, however, that it will not be forgotten. Fractionation of the multitudinous domestic vegetable, fish, and animal oils and reblending offers avenues of escape and progress for the future.

2. The further expansion of imports of copals from Africa and Latin America is dependent not only on shipping, but also upon the development and standardization of the producing industries in the various countries of those two continents, and upon the labor that can be diverted from other projects. Your best insurance is to continue the development of synthetic resins and gums from rosin, turpentine, and other domestic starting points.

3. The tightness of practically all metals may lead to the need of greater and greater ingenuity in pigment substitution. Some colors and especially some shades will inevitably have to be eliminated. This should not be a hardship if you can maintain body, flow, and durability.

Containers—Large

E. E. Hoffman, director of the association's industrial finishes division, handled the subject of large containers, emphasizing the acute steel shortage and suggesting that substitute containers using a minimum of the metal, or none at all, will prove the best answer to the industry's problem. The report consisted of information on 5, 50 and 55 gallon containers, available at the time of writing and subject to change. The data, in part, follows:

Tight Wooden Barrels—50 & 55's

The tight wooden barrel is the only satisfactory substitute for the 50 and 55 gallon steel drums for paint products to date. To insure tightness they should be lined with a coating material. Hide glue and casein solutions are usually satisfactory for most paint products. When the need for special lining materials arises the paint manufacturer can undoubtedly aid the cooperage company by recommending or developing the lining material which will serve best for his product. This service and cooperation by the members of our industry will aid in securing satisfactory containers.

The desired feature in lining is to have the coating material enter all crevices and the pores of the wood in addition to a general coating. Many cooperage manufacturers are equipped so that lining materials are applied under pressure to accomplish effective tightness.

Wooden barrels should be stored with bungs in place preferably in an open shed and off the ground to protect them from the sun, rain and snow. Do not store in a building which is heated. Check barrel to see that hoops are tight before loading.

Barrels may be reconditioned or even rebuilt to render a long life.

Interstate Commerce Commission Regulations governing the employment of wooden containers are briefly as follows: For paint and finishes they are divided into two classifications—those flashing above 80°F are generally acceptable and cooperage manufacturers are familiar with the regulations.—Other paint products flashing at or below 80°F are classified as inflammable and subject to I.C.C. regulations published in Freight Tariff No. 4 by Walter S. Topping, Agent, 30 Vesey St., New York City. Wooden containers approved for transportation of inflammable substances are designated I.C.C. specification 10-C and must meet the detailed specifications published in this tariff.

The manufacturing capacity for cooperage is being absorbed for container requirements in many industries. Immediate action should be taken to insure a source of supply.

A list of the firms manufacturing wooden containers for Paint and Paint Products is made available by the National Paint, Varnish and Lacquer Association.

Tight Wooden Kegs—5 Gallons

The wooden keg is similar in shape and general design to the tight wooden barrel. It is an excellent substitute for the 5 gallon steel pail for paint products. To insure tightness they should be lined with a coating material as covered under wooden barrels of the 50 and 55 gallon sizes.

Storage and car are the same as noted for 50 and 55-gallon barrels.

Kegs may be reconditioned or even rebuilt by second-hand cooper shops.

Interstate Commerce Commission regulations governing the employment of kegs are the same as that noted for 50 and 55-gallon barrels.

Wooden Paint Kits—5 Gallons

The wooden kit is made in various styles—some are made similar to the butter tub but inverted—others are made of plywood side walls, heads and bottoms. Some leakage was experienced with those first produced. Lining and other improvements are being made so that the problem of leakage should eventually be reduced to a minimum.

The paint manufacturer can do much to assist the kit manufacturer by suggesting the lining material best suited for the paint product he intends to package. To insure tightness they should be lined with a coating material as outlined under wooden barrels of the 50 and 55-gallon sizes.

Wooden kits should be stored without bungs, preferably in an open shed and off the ground to protect them from rain, sun and snow. Do not store in building which is heated. Check kit to see that hoops are tight before loading.

We are informed by the representatives of the second-hand re-coopers that it would be impractical to recondition kits since the cost would very near equal the price of new kit.

Interstate Commerce Commission regulations governing the employment of 5-gallon wooden kits are briefly as follows:—For paint products they are divided into two classifications—those flashing above 80°F. are generally acceptable and kit manufacturers are familiar with the regulation. Other paint products flashing at or below 80°F. these packages must be in accordance with specifications enjoying the approval of the Bureau of Explosives.

The manufacturers of wooden kits are being called upon to furnish a variety of wooden containers. Therefore, it is urgent to take action to insure a source of supply for your requirements of kits.

Fiber Containers—5 Gallons

Many designs of fiber containers are now under development, and some of them appear to hold much promise. Some of these units are now under test by members of our industry. To date we have not had any reports to indicate their validity in service. Therefore, we are unable at this time to make a forthright statement recommending them as satisfactory for paint products.

Steel Drums and Pails

Conversion to substitute containers will continue. Further drastic restrictions should be anticipated. The steel shortage is acute and steel must be conserved for vital war products.

The WPB states that manufacturers now using containers made of critical materials should not rely on a continued supply of such containers. There is no assurance that such containers will continue to be available just because satisfactory substitutes have not been developed yet.

The OPA states that: "While it is realized fully that some chemical manufacturers will be forced by the WPB order to utilize glass carboys, tight barrels or other containers more costly than steel drums, revision of the company's maximum price to reflect higher packaging costs will not be granted unless it is demonstrated that the concern has explored thoroughly the possibilities of substituting a cheaper container than those made of steel." "In addition, relief will not be considered unless the increased cost due to an unavoidable change to a more expensive container imposes a substantial hardship upon the seller—that is, the higher packaging cost must be such as to infringe seriously upon the seller's margin between direct cost and maximum price before relief can be considered. Wherever possible, sellers will be asked to absorb these cost increases as their contribution to the battle against inflation."

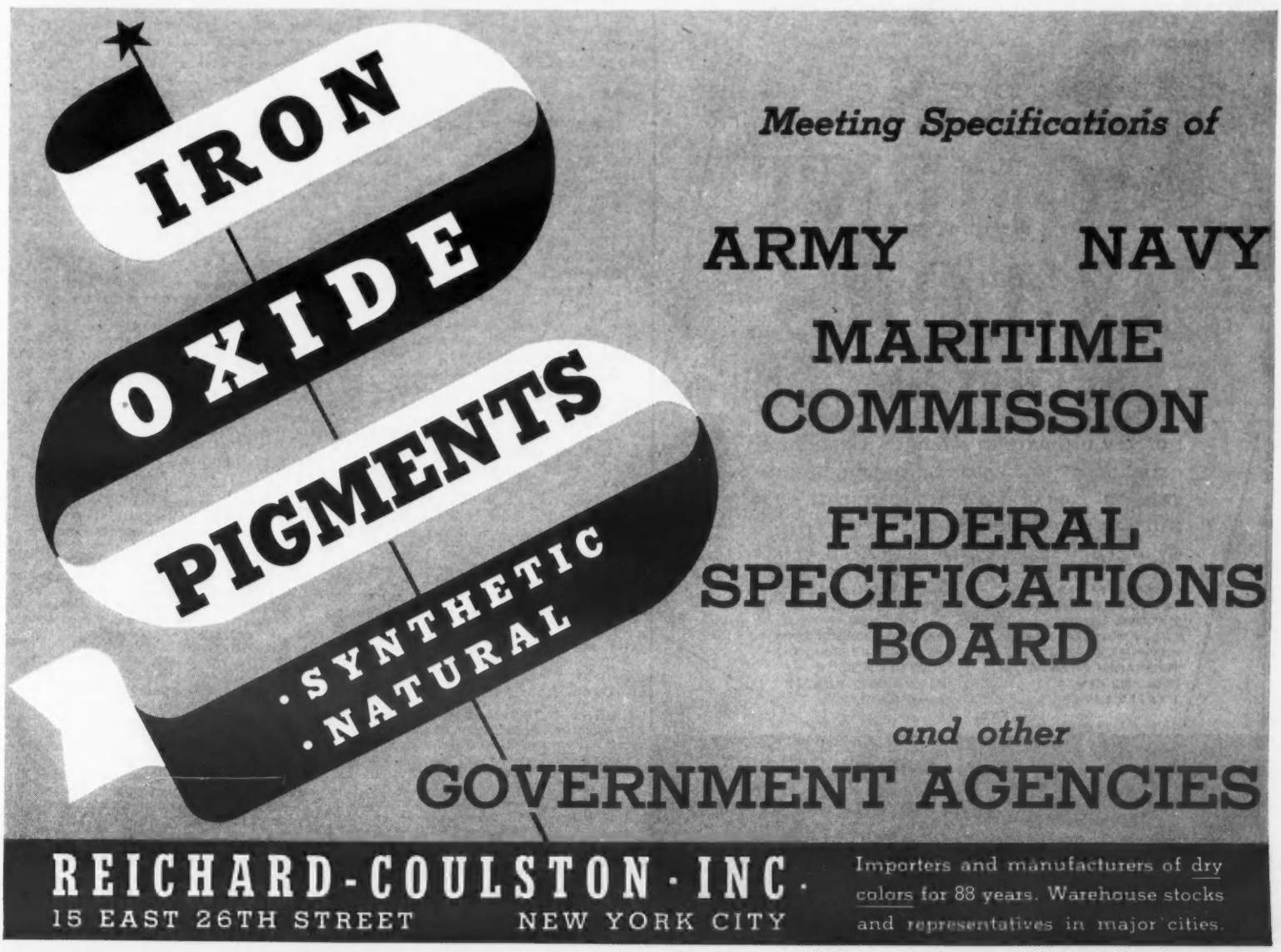
Mr. Hoffman then reviewed Limitation Order L-197, details of which were printed in Oil, Paint and Drug Reporter for September 21, 1942, and called attention to the possibility of an early amendment to advance the effective date from September 14 to November 7.

(Oil, Paint and Drug Reporter in its issue of October 26, printed news of the amendment of Order L-197, giving to manufacturers an extension of time to November 7 for acquiring title to a supply of used steel drums. The original date was September 14.)

Also, he recalled the association announcement of August 18 that approval had been obtained for repetitive use of S.T.C. steel drums not liable to leak in transit, subject to conditions. Application for re-use of single-trip containers for inflammable substances, flashing at or below 80°F, should be made to Walter S. Topping, chief inspector, Bureau of Explosives, 30 Vesey Street, New York City.

Reconditioning Steel Containers

The repetitive use of both heavy gauge and 18-gauge single-trip steel drums is now a well established practice in the paint industry, said Mr.



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Hoffman, who urged the importance of making steel containers serve as long as possible. Drum reconditioning shops are in operation in practically every city, he noted, or the manufacturer may install his own equipment, with a rotating device for the drums which have been loaded with a hot caustic soda solution, a hose for flushing and means for rapidly drying cleaned drums. Auto body repair mechanics can restore deformed drums. As rubber gaskets can no longer be obtained, satisfactory substitutes are now available in the form of a cord-like cellulose paper wrapped in a sleeve of woven cotton.

Reconditioning of five gallon steel pails, which formerly had little consideration, is also a desirable and possible operation, said Mr. Hoffman, the same conditions applying as those for the larger containers. An extra precaution was suggested for seeing that covers are properly opened, and thus conserved.

Containers—Small

Expressing the opinion that the problem of containers is the most serious one to be solved in the coming months, Laurence Kiefer, secretary of the Trade Sales Division of the association, handled the subject of small containers as a review of restrictive orders in the last year. To attempt a prediction, he wrote, would be only to guess, but he did believe that gallons and smaller packages in 1943 will be in glass or fiber containers.

Metal conservation is, of course, at the root of the problem. The industry has been cooperating fully with the government, wrote Mr. Kiefer. Foreseeing stringencies ahead, the Simplification Committee in June, 1941, began studies and, in cooperation with the Department of Commerce, evolved a program to conserve steel by eliminating certain sizes such as one-half gallons for all products, and pints and quarter pints for most products. This voluntary effort became effective January 1, with 90 percent of the industry by volume cooperating. An effort was made to have the then OPM declare the program mandatory, without success.

The association and industry members have carefully studied package substitutes for small sizes. Glass and fiber board seemed to be most promising, said Mr. Kiefer, with the glass industry believed to be in a position to take care of needs for less than gallon containers; gallons in glass are also a possibility. Experimentation is continuing on all-paper container, and containers with fiber sidewalls and metal ends have been used in quart sizes by some manufacturers, but use of such containers generally is much in doubt.

Mr. Kiefer then reviewed WPB Conservation Orders M-81 and M-136. M-81, dealing with tinplate and terneplate, as amended, prohibited the use of these materials for most of the industry products; the lacquers, varnish removers, lacquer thinners, lacquer stains and shellac could be packaged in terneplate gallon cans only. Copper bottom and anti-fouling paints in gallons only could be packaged in tinplate.

Order M-136 on July 22 permitted blackplate gallons and quarts for oil paints, oleoresinous paints, ready-mixed, semi-paste, including but not limited to white lead in oil and colors in oil. Paste resin emulsion paints for exterior use only and varnishes were also allowed quarter gallons and gallons. However, the order said that until September 30, 1942, not more than 50 percent of the pack during the corresponding quarter of 1940 could be in quarts; and after that date none of the above products could be packed in blackplate containers smaller than one gallon.

Of the future, Mr. Kiefer wrote:—

The War Production Board has before it the whole question of small containers for our industry. We understand an order covering these will be issued within a short time. What this will finally be, we don't know.

We also understand WPB contemplates the issuance of an order which will standardize type and sizes of glass container which will be available to our industry.

We believe it will be necessary for our industry to bring its thinking regarding containers for 1943 to the entire absence of steel, except for the small amounts needed for closures for glass and bands for wood packages.

We believe the industry in 1943 must package all sizes, gallons and smaller, in glass and/or fiber.

Transportation

The potential national transportation crisis as it affects the paint and varnish industry, and in the prevention of which the members can play an important part, were dealt with in a paper on "Transportation As a Factor in Concentration," by E. A. Leveille, chairman of the association's Traffic Committee, whose work in connection with freight shipments and costs has been invaluable in the past. An ever-growing burden is being placed on railroads and trucks in meeting demands of armed forces and essential civilian transportation, he pointed out, and government agencies are alert to the maintenance problem, particularly with regard to locomotives. Likewise, they are intently studying excessive and careless use of facilities, duplication of services and the evils of cross-hauling. Mr. Leveille reported that WPB believes there is a large volume of transportation now being used in supplying distant markets with materials obtainable at or near the point of consumption, which is considered highly wasteful.

The Office of Defense Transportation is working closely with WPB in studying excessive and abusive use of facilities. Commenting on cross-hauling, Mr. Leveille said:—

A considerable volume of transportation can be saved, theoretically, if consumers supply their needs in the most accessible market. A purchaser in New York, for example, buying paint and varnish products in Chicago, and the Chicagoan purchasing materials made in New York, present a typical instance of cross-hauling in its narrowest sense—these shipments cross each other on the way, but there are other examples of excessive transportation, as where the purchaser in Logansport or Fort Wayne supplies his needs out of the New York production entailing a relatively long haul, when comparable materials might be obtained from Chicago's production, or that of Indianapolis or Cincinnati, and this is cross-hauling in its broader sense.

Mr. Leveille indicated that WPB hopes to avoid restrictions generally which will approach the allocation of tankcar facilities, but he added:—

There are many things to consider such as the availability of raw materials, questions of manpower and plant capacity, and differences, of course, in the quality of the products. Where the quality is standardized some of these difficulties are not present but where, as in the paint and varnish industry, there are pronounced differences and justifiable preferences, it assumes a complexity requiring a thorough knowledge of the conditions prevailing in the industry and a wise consideration of all of them.

Fifteen States Produce 82.6 Percent

A preliminary study shows that fifteen states in the Eastern area with a population of 70,000,000 (55 percent of the whole) account for 82.6 percent of our total production—$360,000,000. Ten Western states with a population of 30,000,000 account for 14.8 percent, of which the three Pacific Coast states of California, Washington, and Oregon produced 8.3 percent. The remaining eighteen states produced 2.6 percent, exclusive of the six states of Arkansas, Idaho, Nevada, New Hampshire, New Mexico, and North Dakota for which no production figures are reported.

This demonstrates the accomplishment of a regional concentration of production induced by the economic considerations of availability of raw materials, labor, and proximity to consuming markets, uninfluenced by the impact of the extraordinary conditions attending the preparation for national defense.

There are no available statistics showing where this production is consumed, but that a predominant amount is consumed in the Eastern area where manufactured, is not open to serious doubt. There, observers agree, is found a concentration of population industries, and wealth, unequaled in any other section . . . and successive increases in the cost of transportation have promoted a gradual contraction of distributive area; with corresponding reduction in distance to market, eliminating cross-hauling; and diminishing the employment of available transportation.

Contrasted against the comparatively few manufacturers who market their products nationally, there are a very large number of medium and smaller volume manufacturers who find an outlet for their products in what has been termed the "suburban" area, within a

radius of 150 or 200 miles from the point of production, with the shorter hauls predominating...and the larger units, too, compete in these local markets.

Mr. Leveille mentioned shipment of goods to the South and West in cars that otherwise would be empty, and the fact that 82 percent of industry production is distributed in less than car-load quantities (thus providing additional loading for notoriously under-loaded "merchandise" cars) as parts of the problem with which the WPB and the industrty are dealing in "the interest of the preservation of essential national economy — and avoidance of unnecessary and unproductive sacrifices."

Credit was given in the report to the railroads and their national association for the fact that as yet no tignt control over domestic traffic has been initiated; also, shippers have contributed by expediting loading and unloading. Then, to illustrate further opportunities for industry contribution to the transportation problem, Mr. Leveille wrote:—

Opportunities for Conservation

To more fully realize the opportunities presented, the ODT has advanced for the consideration of shippers General Order No. 18, requiring that all cars shall be loaded to their visible capacity, or alternatively their marked load limit. At a meeting in Chicago attended by a crosssection of the paint and varnish industry, this order was discussed, the necessity for it recognized, and the purpose of the paint and varnish industry to extend every cooperation to the Office of Defense Transportation in its program to improve efficiency of railroad facilities, declared. Such a program intelligently and determinedly promoted will yield maximum service of equipment and justify the hope of averting the establishment of a system of priorities.

The possibilities are illustrated by our own experience. Twenty tons of paints, varnishes, lacquers, etc., do not fill a freight car, neither do thirty or thirty-five tons, but to load the visible capacity would weigh over 100 tons and break the car axles. To load the marked capacity is equally impractical, for the lower tiers would not sustain the 100,000 pounds top load, and result in disproportionate and utterly wasteful damages.

Minimum 60,000 Pounds

The Consolidated Freight Classification establishes eighteen tons as the minimum weight to which car-load weights will be applied and promotes to that extent the car load as a sales and distributive unit. At the same time it permits if not actually encourages lighter rather than heavier loads. Notwithstanding that, on the average our cars approximate twenty-one tons. Actually, forty tons have been loaded in a single car under exceptional conditions, specifically, where the load is exclusively or predominately in steel drums, but, aside from the all but insoluble problem of obtaining steel containers, experience has demonstrated that overloading is attended with disproportinate damages, and it is the unanimous opinion of the conferees that...

Sixty thousand pounds can be regarded as a safe load under general conditions and can be exceeded in favorable circumstances.

Section 500.21 (c) provides that "no car shall be loaded to such an extent as to cause damage to the lading," but the problem cannot be solved by certifying as to each car that the load represents the utmost extent to which that car can be loaded without creating or causing damage to the lading because...if the decision is left to the judgment of each individual manufacturer, the result will be a diversity of opinions and practices militating against the attainment of the objective to be achieved by the order, in which the paint and varnish industry has a vital interest.

Avoids Discriminations

To effectively cooperate with the Office of Defense Transportation in its efforts to promote the prudent use of available railway facilities and to, at the same time, assure uniformity of treatment as between all elements in the industry; and to avoid all preferences and discriminations likely to result from too liberal an interpretation of Section 500.21, it was concluded to apply to the Office of Defense Transportation for a General Permit under Section 500.21 (i), fixing 60,000 pounds as a minimum, with the option of heavier loading, circumstances permitting.

If this recommendation is adopted, and we hope it will be, it should result in a reduction of one-third of the amount of equipment utilized in the transportation of the products of the industry, and if this program is generally adopted by other industries, it may prove to be a solution of what will otherwise become a pressing if not impossible transportation problem—impossible for industries continuing to supply the demand for civilian goods.

Industrial Sales

Known and unknown factors in the industrial sales division were dealt with by Paul S. Kennedy, committee chairman, who called for a clarification of problems and clear industry thinking to eliminate defects in practices known to exist. In the all-out war effort consideration must nevertheless be given, he declared, to the reconstruction period, and brains, ability and leadership must be brought to bear. Among the prime matters which call for honest recognition and self-discipline, Mr. Kennedy listed the following:

Distinction between so-called trade sales and industrial finishes sales; that is, the difference between paints and chemicals; the thinking and economics of each is definitely distinct.

Certain prices for certain products have encouraged practices along the line of "how expedient, or how cheap; rather than how good"; continuation would be tragic.

Maximum performance of product for the war effort is a definite industry responsibility; faulty formulation can well impair the war effort.

Sound accounting practices cannot be ignored in a rush for "plus business" in the added volume of war production.

Mr. Kennedy concluded:

We have brains, and we have imagination. They should now be consecrated to the purpose of making products the best we can. To create improvement and refinement. To seek out, employ and adapt the less critical raw materials to a superior war job performance.

It is my firm conviction that if we resolve to firmly direct the laboratories of our industry to product advancement; rather than how to save a penny or two, we will be taking the first long stride toward the proper mental attitude for our industry; and serve the war effort with the efficiency of which we are easily capable.

In these perilous times a manufacturer of protective coatings, so necessary for successful war, falls short of doing his duty as a citizen if he strives only to produce at a price which must of necessity require him to devote his skill to devising goods that will just "get by." It is his responsiblity to consecrate all his skill and experience and all his ingenuity to the development of improved, safer and more efficient protective materials than he has ever produced before. The country needs them. He need not fear that he cannot market them.

Trade Sales Trends

Thurlow J. Campbell, chairman of the National Trade Sales Committee of the association, told of the work of this group in the past critical year in which sales have soared. With 1941 the biggest year in industry history, and an upsurge in the early part of 1942, this year should closely approach last and exceed the previous peak year of 1929. This despite the sharp decline in later months.

Mr. Campbell expressed gratification at reports of continuing easier conditions in the raw materials supply, but explained that it was difficult to forecast the future in this and other problems of direct concern to trade sales manufacturers. He wrote at length on the matter of containers and transportation, details of which questions are given in the papers prepared by Laurence Kiefer, E. E. Hoffman and E. A. Leveille elsewhere in this report.

The industry, said Mr. Campbell, obviously must adjust itself to substitute pails and drums when the present packages are exhausted, and he foresaw the widespread use of glass, even for gallons, and of fiber packages. The transportation situation will certainly be critical, he said, with slower deliveries and the need for placing orders for raw materials and supplies well in advance.

These problems and that of salesmen's transportation will have a restricting influence on the trade division, he said, and advocated concentration of salesmen's calls, revision of territories and pointing up of "plans for bringing buyers to you rather than carrying goods to the buyer."

Mr. Campbell did not attempt to hazard a guess on the future of trade sales, but called attention to the recent decrease with the possibility of a further fall, but with an increase probable for war production. He concluded on the note that while furnishing war protective coatings the industry "must continue to provide the

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Trade Association's Role

The part that trade associations play in our national life, the role they can play in the war effort and in the reconstruction era were splendidly analyzed in "Your Contribution to Victory," by Reuel W. Elton, secretary of the association, who wrote:

Ahead lies the prospect of life or death for men—for businesses—and for nations. What we do today and in the immediate future will have a direct bearing on what that decision is to be. Unless industry can wholeheartedly cooperate in the solution of its war problems, it is quite probable that it will be unprepared to meet the vast problems of the aftermath of war. When the millions of men who will risk their lives to insure the preservation of these United States return to civil life they must be given useful jobs, and ample opportunity for advancement—and if those jobs are not provided through the resources and ingenuity of private enterprise—which has always been the American Way—then the government must and will take over.

Trade Associations—which truly represent industry—will play an important part in that transition period and whether your trade association is big enough—and strong enough—and progressive enough to take its part in the winning of the real victory will depend on you. Self preservation is the ultimate in selfishness and yet self preservation in war can only be attained through centralized cooperation—through coordination and through control. It calls for unity—for devotion to a single objective—for selflessness and the trade association presents the best medium through which this self-preservation may be attained.

Today we have but one objective—to win the war—and your every effort, and every effort on the part of your trade association—must be directed to that one end, for if we lose the war—and "it can happen here"—then everything for which we have been fighting will have been lost and our way of life will be but a memory in history.

The preparation for peace will call for leadership no less aggressive than that leadership which must win the war. Leadership which is a combination of the qualities of strength—courage—sincerity—inspiration—and good old-fashioned personal honor—and that leadership must come from your ranks.

Scientific Section

Intensive research work in protective and concealment paints for the war effort featured the year's activities of the Scientific Section of the association and of 2,000 chemists and technologists of the industry, according to the report by Dr. H. A. Gardner, director of the section, which has just completed the thirty-fifth year of its service. Many of the problems presented were new and of a confidential nature, said Dr. Gardner, but he emphasized that the resulting developments have been of the greatest importance. Close contact has been had with hundreds of representatives of all branches of the armed forces and with government agencies.

In addition to its war work, the Scientific Section is continuing with its study of oil bearing plants, its activities in behalf of special industry groups and its cooperation with technical men within the industry, architects, engineers, dealers, painters and home-owners.

Twenty circulars have been issued since the last convention.

Manpower in War

Deploring the serious and widespread ignorance of the nation's manpower problem, Raymond Rubicam, special assistant to the chairman of the War Manpower Commission, devoted his paper on this subject to a recital of the magnitude of the job ahead, the sacrifices and problems involved and the government machinery which has been set up to accomplish the vast and complex task.

Here are pertinent points in Mr. Rubicam's summary:

Before the end of 1943, the war production force must grow to 20,000,000 workers from the present 12,500,000—a job made tougher by the withdrawal of several million workers into the armed forces.

A farm labor recruiting job of equal importance looms ahead.

In 160 important labor market areas, there are general shortages in 35; shortages are expected in 81 other markets; in 44 areas there are labor surpluses, but everywhere there is a shortage of skilled workers.

Skilled workers must be persuaded to transfer from non-essential work to jobs in war plants; wherever possible, however, problems should be solved with local labor.

Transportation, housing, schooling, child day-care and other collateral problems must be handled.

Old-fashioned discriminatory hiring practices must be abandoned.

Retired and rehabilitated workers must be recalled.

Millions of women now outside the labor force must prepare for work in war and essential civilian activities.

Turnover in skilled workers must be avoided; those at war jobs should be persuaded to stick to them until called into military service or advised by the government to work elsewhere.

Wage differentials and sub-standard wages, poor working conditions, poor living conditions and poor transportation all play a part in worker discontent and change.

Labor pirating can be lessened by upgrading of employees.

Discriminating against negroes, loyal aliens, older people, the physically handicapped and women must be ended.

The key to victory lies not in mere numbers of workers—but in having the right workers on the right jobs at the right time in the right place.

Labor, management and the government must jointly effectuate the policies of the War Manpower Commission.

The public must realize that this is total war, that to win we must use all we have and use it early. No manpower effort which falls short of that can meet our need.

Scientific Section Heads Are Honored

Dr. Henry A Gardner and Paul H. Butler, director and secretary respectively of the Scientific Section of the National Paint, Varnish & Lacquer Association, were awarded engrossed testimonials in recognition of their thirty-five years of service by the Executive Committee at its quarterly meeting held in New York on October 20.

The text of the testimonial to Dr. Gardner, which was handsomely bound and signed by all of the members of the Executive Committee, was as follows:

"For thirty-five years your able leadership and enthusiasm in connection with the technical developments of the Paint, Varnish and Lacquer Industry—your keen imagination and your progressive spirit—your genial personality and patient understanding have played a major role in the progress made by this Association.

"Your splendid qualities as Director of our Scientific Section have created a profound impression upon the members of the Industry at large and we take this opportunity to express the hope that the Industry may continue to have the benefit of your technical leadership, and that we may have the privilege of continuing our pleasant association with you, for many years to come."

"Bataan" Drier Now

An important manufacturer in the paint industry decided to drop the name "Japan Drier" and substituted "Bataan Drier," says the Weekly News Letter of the N.P.V.L.A. He threw away a lot of labels, but advised that the reaction to the change is most favorable. He thinks other manufacturers may like the idea.

Question Forum

—*Continued from Page 41*

unlisted materials (including chemicals) are concerned they have the option of using the PRP ratings assigned to them or extending the ratings attached to their customers' orders. We do not know how many, or what proportion of the paint manufacturers under PRP, have elected either course.

How Many Use PRP?

What percentage of members are operating under this plan and what are their reactions?

We understand that about 350 paint manufacturers, representing about 75 percent of the industry's total volume, filed for operation under PRP during the fourth quarter. It's too early to tell how it is working out for this period but of course most of these manufacturers were required to operate under PRP during the third quarter and elected to do so under the optional provision of Priorities Regulation No. 11 as revised, in the fourth quarter, though it is possible that not all of them understood that fourth quarter operation was optional. As a matter of fact, there was a great deal of dissatisfaction expressed during the first six weeks of the third quarter but the changes which were made during this period appeared to iron out most of the difficulties which were being experienced and apparently those manufacturers who elected to file the fourth quarter, knowing that it was optional, decided that it was worth another try.

Obtaining Customer's Rating

When a manufacturer is working on the PD-25 plan for his raw materials how much longer must he continue to obtain his customer's rating, as well as his allocation symbol number and end use?

The special instructions issued for paint manufacturers in connection with the fourth quarter application permitted omission of the preference rating pattern and purchase symbols were not called for. They were given a schedule of four groups of end use and asked for information concerning materials entering into these four groups but within a few days were told that this information need not be submitted, that it would be their own responsibility to see that the ratings assigned to them were applied to their purchases of materials only as they entered into the respective groups of end use for which each rating was assigned. As a matter of fact, this plan was never followed out because of a general revision of the rating structure. Purchase symbols are requested on the application for the first quarter of 1943 but experience with these symbols, the use of which is required by Priorities Regulation No. 10, has been generally unsatisfactory and it may be that this is just an experiment to determine whether effective use can be made of them.

Establishing ABCD Groups

Is it satisfactory to establish your A, B, C and D groups by three months study and use those figures for PRP? Or must the record be continuous and changeable?

Apparently no use is being made by the War Production Board of this end use classification in the assignment of PRP ratings. However, if the ratings were assigned as planned, they would be used for the purchase of materials in advance and the manufacturer himself would see that materials purchases with the top (military) ratings assigned were not used in the manufacture of products for which the lowest (civilian) was assigned. The situation in the third month of a quarterly period might be quite different from that in the first month of the same period and accordingly he would shift his application of the ratings as occasion demanded. That all appears to have gone by the board for the time being at least.

Is the Plan Working?

Does anyone think this plan is working or can be made to work?

Yes, some think this plan is working and others who do not think so are of the opinion that it can be made to work. On the other hand, there are those who do not think that it is or can. Of course, we are primarily interested in its application to our own industry, but it does appear that it is primarily designed for control of metals and that in general the metal working industries have a large backlog of unfilled orders which enable them to anticipate their requirements with much greater accuracy than can a paint manufacturer.

Correlating PRP with Allocations

How can it be correlated with priorities and allocations?

If we choose to regard priorities as preference ratings and allocation as complete control of distribution of a specific material it is quite apparent that PRP is admirably suited to priorities and not at all suited to allocation. PRP ratings cannot be used to obtain materials which are under allocation; specific authorization is required.

Extending Ratings

Can any rating on customers' orders be extended? (under PRP).

A manufacturer operating under PRP must elect either to use the PRP ratings assigned to him or to extend the ratings attached to his customers' orders. He cannot do both.

Getting Materials Without Delay

Very often you receive orders calling for special raw materials or for increased quantities of standard raw materials. How are you able to get those materials immediately without filing a PD-25F and waiting ten to fourteen days for a reply? Very often these orders are rush and a wait of two weeks to obtain permission to buy the material plus a wait of two weeks to get the material causes quite a delay.

This was a very common complaint during the third quarter. However, the situation has been greatly improved both as a matter of organization of the PRP Unit in the Chemicals Branch and through changes in the regulations which have cut down the number of these appeals materially. In case of a real emergency a telephone call to the PRP Unit in the Chemicals Branch may prove very helpful.

What Are PRP Advantages?

What advantage, if any, is there in operating under PRP in the paint industry where it is not compulsory?

As set up for the fourth quarter, the two principal advantages are the assignment of a AA-2X rating for maintenance and repair and of ratings in the AA series which can be applied against the purchase of materials in advance of the time they are actually required. Some manufacturers to whom small orders do not constitute a problem may prefer to extend the ratings attached to their customers' orders and may advise WPB to that effect within seven business days after receipt of their PRP certificate. Again, they must use either the PRP ratings assigned to them or the ratings attached to their customers' orders; they cannot do both.

PRP and Scarce Materials

Does the rating a paint manufacturer receives as PRP unit aid him in getting slightly scarce materials if he has a B rating?

The lowest PRP rating assigned for the fourth quarter is AA-5. During the third quarter B ratings were assigned in connection with purely civilian requirements but since all rated orders must be given preference over unrated orders it could not be said that they were valueless. The real scarce materials are under allocation and cannot be obtained with even the highest preference ratings. From that point on down to the materials which are so freely available that they can be purchased without preference rating assistance, the rating necessary to obtain delivery of the material would vary from A-1 down to B-8, according to its degree of "scarcity." But even a B-8 would be assistance in obtaining a material scarce in the sense that it cannot be purchased without preference rating assistance but at the same time available in sufficient supply to take care of all rated orders. It is probably not the intention to give PRP producers any advantage over those competitors who are not under PRP so far as preference ratings are concerned, and since AA-5 is the lowest PRP rating it is to be assumed that PD-1A applications will shortly be processed with the assignment of equal ratings for equivalent use. The blanket ratings assigned by orders in the P series would then be of very little value and accordingly it would appear that many of these orders would have to be amended or possibly revoked or permitted to expire as was suggested some months ago. At any rate it appears that the preference rating structure is being inflated and that the AA-5 will soon be the equivalent of the A-10 of the past.

Is Compulsory Filing Near?

Are there any indications that paint manufacturers will again be compelled to file under PRP in the near future?

No. The WPB estimate of the number of manufacturers in all branches of industry who would be brought under PRP in the third quarter by the mandatory provisions of Priorities Regulation No. 11 evidently fell far short of the actual number, and that is to say by several thousand. The result was a tremendous volume of work which they were not equipped to handle efficiently. The plan is best adapted to the control of metals and so far as our industry is concerned it was the inclusion of nonferrous compounds in the original metals list that brought most manufacturers under mandatory provisions of the regulation. When these compounds were dropped from the metals list on August 14 it changed the status of paint manufacturers and probably many producers in other industries also, so that continued operation under PRP became optional rather than mandatory and there

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have been no indications that there will be an early return to the mandatory status.

What Is Future of PRP?

There have been so many statements in the press and business association advices to the effect that PRP was "out the window" and yet when we inquired of the WPB in New York, they have no information. Has your office any reasonable indication as to the future of PRP?

These rumors have been persistent but PRP has persisted through them. In the early days, when it was optional, most manufacturers operating under PRP liked it but as soon as it became mandatory for Class I producers there were many objections raised within industry and also within the War Production Board itself. Theoretically, there is much in its favor but it has yet to prove itself in practice. There have been many changes made already and undoubtedly there are more to come. It may outlive its usefulness but that, too, has to be demonstrated, and while no one can predict the future it is, of course, a fact that applications are now being received for operation in the first quarter 1943. As has been stated previously, it seems best adapted to the control of distribution of the metals and it is now mandatory only for producers who consume $20,000 worth of metals in a year, with certain exceptions. There may be further exceptions made or other modifications introduced to circumscribe its scope but at present this is all within the realm of speculation.

How Are Small Plants Affected?

How does the Production Requirements plan now affect the small paint manufacturers?

The small paint manufacturer is not required to operate under PRP, but he may file the PD-25A application if he wishes to do so. It probably will not assure him of obtaining materials which he cannot obtain otherwise, but if preference rating assistance is required, he may wish to weigh the advantages of having ratings which he can apply against the purchase of materials before they are actually needed as against the extension of ratings attached to his customers' orders.

Critical Materials

Are New Formula Changes Near?

Are more changes contemplated in formulas?

It is impossible to answer this question. Upon the whole, our conventional paint-making materials appear to be in a relatively favorable position and in some cases the restrictions which were imposed earlier in the year have been lifted. As new military requirements may be developed for specific materials, however, it may be necessary to reformulate to replace them. The demand for toluol in the manufacture of munitions and for benzol in the production of synthetic rubber may be cited as specific examples of wartime developments which have diverted materials from their normal use. These situations are unpredictable and we shall have to meet them as they occur.

Is Trend to Complete Allocation?

Is the general trend towards complete allocation?

It might be reasonable to assume that the general trend is in this direction but only with respect to those materials which are critical in the sense that the supply is inadequate to provide for military requirements without more definite control than is permitted by the application of preference ratings. Allocation is based upon a knowledge of the available supply and control of distribution with respect to essentiality of end use. Preference ratings assigned to orders mean little or nothing when it comes to allocation; it is a question of essentiality of the end use and the availability of satisfactory substitutes, if any, which is the determining factor.

Is Blanket Regulation Possible?

Could a blanket regulation be adopted for all materials on critical list?

This is extremely doubtful. The Priorities Critical List, inherited from the Army and Navy Munitions Board, no longer exists as such and the word "critical" has been used so loosely that there is no generally accepted definition. Originally, it is probable that a material was considered critical if the supply was not sufficient to provide for both military and civilian needs; now there are materials of which the supply is not adequate to provide for all military needs and yet a certain portion must be made available for essential civilian needs. Consider the plight of the army, for instance, if an epidemic were to sweep the civilian population upon which it is dependent for its supplies for the lack of sufficient chlorine to make the water supply safe.

Would Eliminate PD-600

Suggest association use effort to eliminate Form PD-600 on account of difficulty in anticipation as far in advance as is required on chemicals. Why not allow them to be obtained under Form PD-25A?

Form PD-600 is the new standard form used in making application for materials which have been placed under allocation by the Chemicals Branch. The association urged and assisted in the development of this form which replaced twenty-four currently in use at the time of its adoption and eliminated the necessity for about as many more which otherwise would have been introduced since that time. The form is not perfect and will probably be modified when the current stock is exhausted. PD-25A is inadequate for the control of materials of which the supply is so limited as to require allocation. One reason is that at the same time authorizations for the purchase of material are made on PD-25A, ratings for the same material may be assigned on PD-1A, to say nothing of ratings which may be extended by producers who are not operating under PRP. Also, very few chemicals are listed separately upon the new PD-25A form, all other materials entering into the composition of the products of our industry being considered chemicals for the purpose of PD-25A and reported as a single dollar-value total so that it is impossible to gear the purchases of any specific material under PD-25A, to the available supply. Allocation appears to offer the only solution in the case of materials which are available in adequate supply.

Chinawood Oil for Consumer Goods

Is there any possibility of the softening of Chinawood oil restrictions for consumer goods?

This would appear to depend entirely upon the opening up of the sea lanes and the availability of cargo space to permit the importation of supplies which we know are available in China. Until such time we must assume that the supplies which are available in this country now as well as those which may be produced in this country will be carefully conserved. The oil was placed under complete allocation on October 1.

Rosin and Linseed Oil

Will we be reduced eventually to rosin and linseed oil?

The usual way of answering a question like this is to ask how long the war is going to last. At the worst, we might not have enough of even these but, of course, we are now producing some tung and probably will be producing some castor within another year. Also, we know that there are ample supplies of tung oil in China, of castor beans in Brazil (with indications of a good crop of oiticica), and plenty of natural resins waiting for us to come and get them. It all depends upon how soon the sea lanes can be opened and how much cargo space is available for these materials.

Offerings of Aluminum Paint

Why are a few companies allowed to offer aluminum paint to us and jobbers and retailers in general?

We understand that the War Production Board has made a few allocations of secondary aluminum under the Undue Hardship clause of M-1-g. It probably was not contemplated that relief of undue hardship would take the form of extensive promotion in new fields. It is doubtful that this condition will exist long.

Selling Frozen Oil Stocks

Is it possible to dispose of frozen oil stocks without taking a loss?

This may depend upon the price which was paid for the oil. The Defense Supplies Corporation will buy tung oil and oiticica but each purchase is an individual transaction and we understand that the price originally paid is an important consideration. Even if the oil is held for approved use there is the capital investment with interest and insurance charges to be considered so that there will undoubtedly be some loss if the oil was purchased at or near the OPA ceiling price.

Filling Out of Forms

On allocated materials, forms must be in by the 15th of the month previous to the month in which delivery is requested. Do you fill out your forms based on estimates, and if so how do you determine the ratings to put on the forms?

Of course, we all understand that in our business it is impossible to anticipate orders as it is in some others where unfilled orders on the books will tax production capacity for some months to come. In making requests for allocation past experience is probably the best guide in estimating anticipated requirements. Form PD-600, which is now being used by the Chemicals Branch, does not ask preference ratings attached to orders to be filled during the month for which allocation is to be made but does ask for preference ratings attached to orders filled in the last preceding month. It is the essentiality of end use which is the determining factor, and it is possible that even this preference rating information will not be requested in the future.

What About Raw Materials?

State raw materials outlook for 1943. What shortages or restrictions appear possible?

The current raw materials survey constitutes a portion of Mr. Trigg's address.

Linseed Oil Restrictions

Is a restriction beyond 20 percent in the use of linseed oil indicated for the quarter beginning January 1, 1943?

This question refers to M-71 as amended September 22 which restricts the aggregate consumption of fats and oils to 80 percent of the base period. Since tung, oiticica and castor are all under allocation and their consumption will be considerably less than 80 percent of consumption during the base period, the difference in the quota will undoubtedly be made up by the use of more linseed. Accordingly, it should be considered that the order as issued does not restrict the consumption of linseed oil by 20 percent though deliveries of linseed oil to other than manufacturers is limited to 80 percent of such deliveries during the base period. Also, 100 percent of the base period, which is the average for the same periods of 1940 and 1941, undoubtedly does represent a less favorable situation than if we were to consider 1941 alone, since 1941 was the biggest paint year in history. Under the order as issued on September 22 there is no military exemption and numerous appeals have indicated the necessity for making some adequate provision for meeting these requirements. We believe this will be done and it may be done even before this appears in print. If military requirements are excluded altogether in calculation of the quota, and the quota becomes purely a civilian quota, there may be some further reduction but everything considered the total consumption of linseed oil in our industry during the first quarter of 1943 will probably be in excess of 80 percent of the consumption during the base period.

Transportation

Hardships of Capacity Loading

If cars must be loaded to capacity it will be a hardship to small plants, as they haven't the room to take in from forty or fifty tons of this material. Thus they will be forced to buy less-than-carload lots, paying more for raw materials, thus increasing the cost of finished product.

The imposition of any "capacity loading" order will visit hardships upon industry generally—and the text of the order must be studied for exceptions and clarifying provisions modifying its absolute sense. There is no intention to exact widespread and unnecessary sacrifices, and it will be our purpose to observe the results, and seek such additional exemptions and interpretations as circumstances require. This general subject is discussed in the paper on 'Transportation a Factor in Concentration."

Are Paint Restrictions Imminent?

Is there under consideration now, or in your opinion, is there a possibility of restriction of paint shipments to all parts of the country? If so, what steps are being taken to combat such a plan.

The Protective Coatings Section of the War Production Board is organizing a traffic committee, whose function will be to study distribution practices in the industry and submit recommendations designed to reduce what is regarded as unnecessary demands for transportation services; "cross-hauling," etc., A study of the production and distribution problems of the industry should be a condition precedent to the recommendation of restrictions and the traffic committee to handle this has not yet been named. For further discussion of this general problem see paper on "Transportation a Factor in Concentration."

Rates on Paper and Fiber Cans

Have all paper or fiber containers been approved to move at same LCL freight rates as steel drums and paint in cans in corrugated cases?

This question cannot be answered without reservation. The Bureau of Explosives has not, for example, approved fiber drums for the transportation of inflammable liquids—liquids flashing at or below 80° F...but is considering a recommendation to authorize the use of fiberboard cans (in boxes) for such products. As to our high flash point numbers classified as non-inflammable, Consolidated Freight Classification Rule 41 governs, and tests are being conducted by individual manufacturers to determine the merit or otherwise of fiber drums as containers for paints. The five-gallon size is of particular interest and those found to be meritorious will be approved for transportation at the same less-carload freight rates as paints in steel drums and in cans in corrugated boxes.

Warehouse Congestion Foreseen

More light on actual effect on new transportation regulations badly needed. Effective regulations on movement of raw material, burdensome and almost impossible, may result in greater congestion in warehouses and other equally burdensome means in order to allow consumer to obtain requirements in even reasonable quantities.

Prospective regulations, meaning "Office of Defense Transportation General Order No. 18," are expected to require, with qualifications, more intensive use of railway equipment generally referred to as "maximum loading." Currently only half of the capacity of the equipment is utilized and with the possibility that supply of equipment will be insufficient to meet the demands, measures to improve efficiency can not long be avoided. But there is no desire to inflict widespread and unnecessary hardships, and specific instances of any which are not covered by the provisions in the order will, we believe, be given sympathetic consideration. For further discussion see paper "Transportation a Factor in Concentration."

Effect of Cross-Haul Ban

It is probable that cross-hauling will be forbidden and to what extent will it affect our industry in general?

Some limitations upon the demands for transportation may be imposed as a result of the study being given to this subject by the Office of Defense Transportation in cooperation with the War Production Board. The Protective Coatings Section is organizing a traffic committee to study production and distribution in the paint and varnish industry and will recommend measures designed to economize in the use of transportation facilities. Doubtless restrictions on excessive transportation—"cross-hauling," among others—will be considered for the reason, among others, the Germans have so dealt with their transportation problems—German bakers, for example, are forbidden to deliver bread distances greater than fifty kilometers; beer can be shipped no further than 250 kilometers, and under a new decree such measures are to apply to almost all goods in Germany. A study of our industry will show that at least 80 percent of our production is distributed in less-carload quantities and (2) "merchandise" cars, in which less-carload shipments are assembled for transportation, have some unused capacity. In its first order ODT No. 1, Office of Defense Transportation required "merchandise" cars moved before July 1, 1942, loaded to a minimum of six tons per car; between July 1 and September 1, 1942, to a minimum of eight tons; and beginning in September to a minimum of ten tons. You will be interested in the discussion of this general subject in the paper, "Transportation a Factor in Concentration."

Technical Problems

What New Oils Will Be Used?

With restrictions on all common drying oils, what other oils will the industry turn to for use in paint and varnish products?

The industry must utilize such quantities of these oils as may be made available. If restrictions become more severe, the amount of oil employed in formulations must be reduced. This can be done, for instance, by the use of heavy bodied oils with large amounts of mineral spirits or other thinner than is ordinarily employed. Emergency Federal specifications for various paint products now specify the use of such formulations.

How About Tall Oil?

How does tall oil fit into the paint picture?

This was answered on page 2 of the Scientific Section Letter of September 24. The properties of tall oil were given and suggestions made for experimentation in various formulations. Unfortunately, tall oil containers free acids instead of glycerides, and does not dry satisfactorily. If glycerin were available, it could be readily esterified or bodied to improve drying properties. Paint chemists are now experimenting along the above lines. Producers of tall oil and their sales agents have literature which would be helpful.

What Is Outlook for Oils?

What is possibility for more ample supplies of linseed oil and other technical oils, including castor and china wood oil?

The outlook is not encouraging. Our industry therefore must do the best possible job with the oil made available and bend every resource to adapt existing materials.

Patents on Reclaiming Processes

What is the patent situation on reclaiming processes, that would prevent a non-licensee from entering the field?

We understand that there is one process—the Saunders process—under which people may license if they see fit. There is also the Meckler process which has to do with emulsifying. The War Production Board is, of course, interested in encouraging reclaiming processes, but cannot take any stand on patents. It is up to each company to determine through its legal department what action to take.

Paint, Varnish, Lacquer Materials

Seasonal Tapering Off of Painting Operations Is Reflected in Diminution of Demand for Lead and Zinc Pigments, Fillers and Extenders—Casein Situation Rectifying Itself

With the seasonal tapering off of outdoor painting operations in all but a few milder climate regions, there has been a marked diminution within the past week in the call for the materials most extensively used in the making of outside coatings. Thus there has been a notable shrinkage in new buying of lead and zinc pigments, especially in lithage and lithopone, titanium and lead titanate, although the movement of zinc oxides and sulphides and also of titanium on outstanding contracts has kept up in proportions reminiscent of the outset of Fall painting activities, when pronounced recovery from the mid-summer lethargy was signalized by a burst of purchasing operations in virtually all lines of pigments, filler and extenders. As there has likewise been a letdown in interior painting, with the termination of the Fall renting period for apartments and stores, there has also been a slackening of the domestic demand for dry and chemical colors and varnish gums although business in these colors has continued fairly brisk on South American export account. There has been little abatement, however, in the request for solvents and driers.

Despite the indefatigable efforts of national and local paint manufacturers' organizations to stimulate protective coating and maintenance painting of privately-owned buildings throughout the country with their persistent paint-up and clean-up campaigns, it has now become apparent that approximately 60 percent of the current business in painting and paint materials is in Army, Navy and other federal government jobs or lend-lease operations, compared with 25 percent, last year, and only 5 percent in pre-war years and other periods before this country entered into defense preparations.

OPA is expected to take some action shortly toward establishing a new and universal price ceiling for casein. Some progress toward straightening out the chaotic conditions recently prevailing in the market for casein of domestic origin has already been made by the withdrawal from this market of all sellers of "distress lots," after disposing of their offerings at the lowest of the individual ceilings, as this has left the current low quotation a half cent per pound higher than it was when Temporary Price Regulation No. 22 made it necessary for each producer to fix his own maximum price at the highest figure named by him in the period September 28-October 2.

Price Changes

Advanced

Casein, domestic, price situation strengthened by withdrawal of the cheapest sellers from market, thereby advancing lowest of the individual ceilings ½c. per lb.
Resin oil, 3c. per gal.

Reduced

None

Comparative Values

Index numbers compiled from ten typical paint and varnish materials on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
140.2	**140.2**	**140.2**	**137.9**

Market news that may have developed after this report was sent to press will be found on page 4.

Metallic Lead and Zinc

Manufacturers of lead pigments are finding the supply of pig lead available to them more than sufficient for all their recently somewhat contracted requirements. WPB's stockpile has been built up to sizable proportions, well in excess of its immediate and also nearby needs, by the well sustained domestic production and exceptionally large imports, with the result that this bureau has suspended its so-called lead-producers' pool, to which these producers had previously been compelled to contribute a sizable percentage of their monthly output. However, the government authorities are not committing themselves to an unlimited suspension of their "bank" contribution arrangements, as they contend that they cannot prognosticate what demands may be made upon them in the future and they are therefore desirous of maintaining at all times an adequate reserve for unforeseen requirements. Although by no means in such liberal supply as metallic lead, zinc slabs are also readily obtainable by the makers of zinc oxides and sulphides in sufficient amounts to meet all current and nearby needs.

Lead. — Prevailing spot prices at New York, St. Louis and London for the period from October 23 to October 30, inclusive, were as follows:—

	Pigs				
	Per pound		Spot, London. Per ton		
	New York.	St. Louis.	£	s.	d.
Saturday	$0.0650	$0.0635	*	..	..
Monday	.0650	.0635	..	..	..
Tuesday	.0650	.0635	..	..	..
Wednesday	.0650	.0635	..	..	..
Thursday	.0650	.0635	..	..	..
Friday	.0650	.0635	..	..	..

* London exchange closed.

Zinc. — Prevailing spot prices at New York, East St. Louis and London for the period from October 23 to October 30, inclusive, were as follows:—

	Slabs				
	Per pound		Spot, London. Per ton		
	New York.	E. St. Louis.	£	s.	d.
Saturday	$0.0866	$0.0825	*	..	..
Monday	.0866	.0825	..	..	..
Tuesday	.0866	.0825	..	..	..
Wednesday	.0866	.0825	..	..	..
Thursday	.0866	.0825	..	..	..
Friday	.0866	.0825	..	..	..

* London exchange closed.

Pigments

Blue Lead.—A slight slackening of Stocks are again adequate, with prices, however, well maintained.

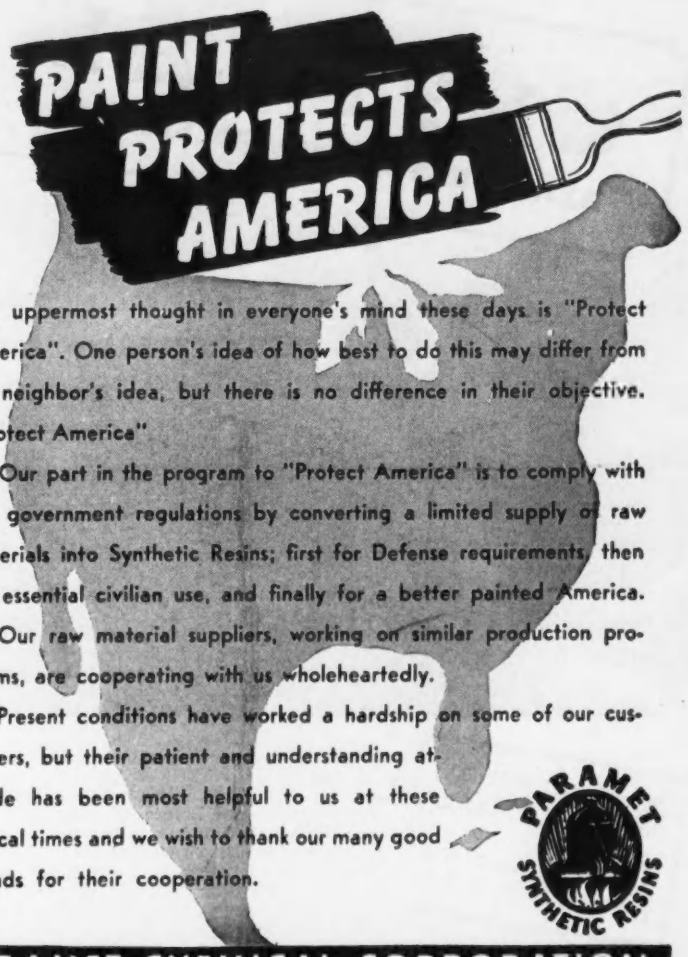
Lead Titanate.—Movement of this material into consuming channels on old contracts continues to reach fair proportions but new buying is limited to current needs. Supplies still sizable. Prices firmly held.

Lithage.—A moderate demand continues to be reported for this pigment but recent purchases show a recession from the peaks hitherto attained. Stocks normal. Tone steady.

Lithopone.—In moderate request. Movement into consuming channels on outstanding contracts holding up well. Stocks ample. Prices stable.

Orange Mineral.—A fair buying interest continues with the undertone of the market strengthening. No further weakness has developed in

Current prices on paint, varnish and lacquer materials are given in the alphabetical list of prices beginning on page 9


PAINT PROTECTS AMERICA
The uppermost thought in everyone's mind these days is "Protect America". One person's idea of how best to do this may differ from his neighbor's idea, but there is no difference in their objective. "Protect America"
Our part in the program to "Protect America" is to comply with the government regulations by converting a limited supply of raw materials into Synthetic Resins; first for Defense requirements, then for essential civilian use, and finally for a better painted America.
Our raw material suppliers, working on similar production programs, are cooperating with us wholeheartedly.
Present conditions have worked a hardship on some of our customers, but their patient and understanding attitude has been most helpful to us at these critical times and we wish to thank our many good friends for their cooperation.
PARAMET SYNTHETIC RESINS
PARAMET CHEMICAL CORPORATION
MANUFACTURERS OF SYNTHETIC RESINS
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There's no time to lose
There's just time to WIN
Calco

CALCO CHEMICAL DIVISION
AMERICAN CYANAMID COMPANY
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Boston • Philadelphia • Providence • New York • Charlotte • Chicago

Quite frankly, supplies of dyes and related chemicals are "subject to change without notice" these days. Changing demands for government requirements—re-alignments in priorities and allocations—variations in demand for civilian use affect the availability of scores of colors almost from week to week. Some can be furnished only on priority, but many, many others can be furnished in ample volume. Even among these, there is unavoidable uncertainty as colors which may be scarce today may be plentiful tomorrow—and vice versa.

A practical solution to this difficulty is to keep in touch with your Calco representative as you plan your production. He has a constant, up-to-date check on what colors are available—which require priorities—and the likelihood of replenishing supplies which are currently short. So keep in touch with your Calco representative by phone—or better still, ask him to call—you'll find him a worth-while member of your "ways and means" committee.

GLYPTAL

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V ALL OUT FOR VICTORY!

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Yes, G-E Glyptal Resins are serving wherever our armed forces may be—on land, in the air and on the sea. Paint formulators can be sure that Glyptal products will meet the most rigid requirements for stability, uniformity and long life.

General Electric pioneered in the development of alkyd resin solutions and is a recognized leader in this industry today. Glyptal products are manufactured in accurately controlled equipment and are of the highest quality.

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3

RUTILE TITANIUM DIOXIDES

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RAYOX R-110

for interior finishes and for white exterior finishes when a non-chalking pigment is not desired.

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for all tinted exterior finishes and whites requiring maximum chalk resistance and luster retention.

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All purpose pigment, intermediate in properties between RAYOX R-110 and RAYOX R-610.

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molybdate orange. Prices strongly held.

Red Lead.—Call for this product is slowly receding but the market keeps firm, with supplies reaching only fair proportions.

Titanium Dioxide.—A fairly sizable movement continues on old contracts but new purchasing has shown some diminution of late. Offerings being more freely made. Prices firmly maintained.

White Lead.—In somewhat diminished call. Stocks normal. Prices strongly held.

Zinc Oxide.—Though once more exhibiting a dragging tendency, this pigment is still moving fairly well into consuming channels on old contracts. A large amount of new business is expected to result from the anticipated acceleration of the synthetic rubber production program.

Gypsum.—In fair request. Stocks being steadily reduced. Prices well maintained.

Mica.—A fairly active demand is reported for both foreign and domestic goods. Supplies adequate. Tone firm.

Talc.—A moderately keen call is noted for this material. Stocks light. Prices firmly held. The recent banning of the use, sale and delivery of steartite talc, except for use in insulators in communications, radio, radar and underwater sound instruments, spark plugs for certain war agencies, filtering of foods, flavoring extracts and medicines and in both medicinal and health supplies, has held little interest for the paint industry which has virtually no use for this grade. Fairly sizable stocks of this kind of talc are held, however, by exponents of the paper-making and textile trades.

Whiting.—A moderate buying interest continues to be reported for this material. Supplies adequate for current needs. Tone steady.

Driers

Stearates and palmitates continue moving steadily into consuming channels with their prices well maintained on new business. There is also a steady demand for linoresinates and other substitutes for naphthanates which are now under complete allocation control.

Dry Colors

Business in dry and chemical colors has continued "spotty" within the past week, with the demand in some of the hitherto most active lines steadily diminishing. Shipments for October, however, have averaged about the same as those for September. While there has been a marked recession in the takings of chrome colors by domestic consumers, the South American export trade in these colors has continued brisk. Prices have generally been well maintained, with the only shading noted being on government business. Reports persist that OPA is preparing and about ready to issue a new set of ceiling prices for the entire list of dry colors.

Alkali Blue.—In fair request and light supply. Prices well maintained.

Bone Blacks.—A moderate movement continues to be noted. Stocks are still ample and prices steady.

Carbon Blacks.—A more than moderate buying interest continues with sales of all grades for October recorded as having run only slightly under those for September, and with shipments of channel black a little larger than those for the previous month. Prices well maintained on all grades.

Cadmium Colors.—Although the production of cadmium in the United States now accounts for 60 percent of the world's total output, there has been no tendency on the part of WPB to date to ease its restrictions on the use of this mineral by paint material manufacturers, with the result that its General Preference Order M-65 continues virtually prohibiting its use in pigment making. Hence, cadmium colors are at a standstill except for occasional shipments of stocks already on hand.

Chrome Colors.—Export demand, from South American countries, continues active for all these colors. Domestic buying interest, however, has decreased of late. Tone of the market remains steady for both green and yellow chrome and also for zinc yellow chromate.

Lithol Toners.—Only a light demand is reported for these colors. Stocks are sizable. Prices well maintained.

Mercuric Oxides.—In moderate request. Supplies none too liberal. Recent amendments to mercury conservation order M-76 have had no effect upon the manufacture of these oxides.

Ochers.—A small buying interest continues to be manifested. Stocks are still light. Tone steady.

Vermilion.—All descriptions, including quicksilver vermilions, American vermilions and vermilionettes, continue in fair inquiry. Supplies, however, are still sizable. Prices well maintained.

Fillers and Extenders

Asbestos.—Stocks continue ample but are being steadily reduced by buying of those grades used in the paint trade. Prices steady.

Barytes.—A fair buying interest is being shown in this filler. Supplies continue sufficient for current requirements. Tone stable.

Charcoal.—Moving satisfactorily into consuming channels at the prices recently set by the General Maximum Price Regulation establishing ceilings at the highs of March. Stocks slightly reduced but still adequate.

China Clay.—A moderate-sized buying movement is reported for this material. Supplies ample. Prices well maintained.

Diatomaceous Earth.—Steady request noted for this product. Stocks fair-sized. Market tone steady.

Fuller's Earth.—A modest call continues to be noted for this material. Stocks sufficient for current requirements. Prices firmly held.

Graphite.—Buying interest keeps up well. Supplies ample. Tone stable. According to trade reports from Ceylon reaching the U. S. Department of Commerce, most of that country's 2,000 known graphite properties have been put into production, in an effort to supply the increased wartime demand.

Lacquer Materials

Acetone.—Good demand from government and normal consumers. No changes pricewise.

Butyl Alcohol.—Allocations rule.

Butyl Acetate.—Tone firm. No change quotably.

Cellulose Acetate.—Current output understood to be far ahead of 1941 production. Movement in considerable volume for numerous war uses and uses created by present conditions. Acetic anhydride, used principally in manufacture of cellulose acetate, now under allocation. Quotations on cellulose acetate show no change.

Diamyl Phthalate.—Good demand against short supplies. Phthalic anhydride, under allocation and use control, continues tight despite heavy production schedules. Diamyl phthalate quotations firm.

Dibutyl Phthalate.—Movement in considerable volume into manufacture of smokeless powder and synthetic rubber. Prices same. See diamyl phthalate.

Diethyl Phthalate.—Good demand. Undertone firm. See diamyl phthalate.

Ethyleneglycol.—Allocations granted in full last month for use in chemical manufacture, industrial dynamite, cellophane, general plasticizer, radio condenser fluid, and essential industrial heat transfer mediums; granted in

DRIERS

For dependable and efficient drying of every type paint, varnish or enamel . . . Cobalt, Lead, Manganese, Aluminum, Calcium, and Zinc: Uversols (naphthenates), linoleates, linoresinates, oleates, pastes, resinates, stearates, soyates, and laurates.

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Harshaw pigments are stable, inorganic chemical compounds . . . These colors, produced by special processes, are unusually clean and brilliant and exceptionally fast to light . . . Chrome Yellows, Zinc Yellows, Molybdated Orange, Chrome Oxide Greens, Guignet's Green, Cadmium Sulphides, Cadmium Lithopones, Cobalt Blues and Cobalt Violets.

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Increases spreading capacity. Imparts easy working and better flowing properties. Soft, grinds easily, producing a smooth, short paste.
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Meeting Specifications of the Army, Navy, Maritime Commission, Federal Specifications Board, Panama Canal, & other Government Agencies.
For Protective Coatings, Camouflage, and other essential requirements of the Victory Program.
C. K. WILLIAMS & CO. EASTON, PA.

part for use in civilian antifreeze, 20 percent on basis of prescribed quota under L-51. No movements pricewise.

Tricresyl Phosphate. — Allocations rule. Material under full priority control. Price schedules show no change.

Shellac

The sale of shellac has passed under the full control of **Federal authority.** Where shellac shall be sold, to whom, in what quantity, and at what price is now determined by the government authorities concerned with production and price control. Shellac dealers are merely a connection link between government and manufacturing consumer. The control of supplies is tight and exercised to the full and since there is no reason to expect that supplies will be available in large quantities in the future, conservation of the shellac already in the country is necessary to the successful prosecution of the nation's main business—to win the war.

Synthetic Resins

Chlorinated Rubber.—With production virtually at a standstill, stocks of this material are becoming very small. Aside from the business of disposing of the remaining supplies on hand to essential industries, there is no current movement of these goods. Market tone still stable.

Ester Gum.—A moderate demand continues in these gums. Supplies, however, are still ample and prices are being strongly maintained.

Polyvinal Resins.—A meager movement of these rubber substitutes continued to be reported up to the end of October but has ceased since they were placed under complete allocation control under the terms of Conservation Order M-10 on November 1.

Paraphenyl-phenol Resins.—To obviate exhaustion of stocks of these resins, used extensively in protective coatings for the armed forces and as a special type of germicide, WPB has put them under complete allocation and use control under the terms of Conservation Order M-254. Ordinary use of these synthetic resins is for the making of plastics.

Varnish Gums

Although still limited in their takings to sixty days' supply, varnish makers are buying a little more actively of copals, as well as Dammars and Kauris. Notable purchasing interest is also continuing to be shown in spirit soluble gums, the stocks of which have been so heavily reduced as to incite local dealers to negotiate for shipment eastward of some stocks in the West. Prices continue well maintained at the maximum price levels announced tentatively by OPA last spring but it is expected that further action toward establishing permanent price ceilings will soon be by that bureau.
taken by that bureau.

Glues and Binders

Casein.—Although there has been no notable broadening of the demand for domestic grades from the leading consumers, consisting of papermakers and plastic paint manufacturers together with the producers of other plastic products, the situation has been partially readjusted within the past week by the complete sellout and subsequent withdrawal from the market of numerous "distress lots" which had hitherto been elongating the range of individual price ceilings by being offered as low as 18½c. per pound for 20-30 mesh domestic goods. The retirement of these low price ceiling producers and dealers from the market has left 19 cents the "inside" figure for this material. Leading producers are now holding out for their individual ceiling prices which range from 20 cents to 22 cents per pound.

Although the picture has thus been cleared up to some extent—as best it may be under the terms of OPA's Temporary Maximum Price Regulation No. 22, establishing the various ceilings of individual holders at the highs of September 28-October 2—it can never be completely clarified until a new and universal ceiling is fixed by OPA. This, it is now believed, will be done eventually.

And, supplementing WPB's Order M-56, permitting the use up to one pound of Batu gum and up to two pounds of Congo copal gum per gallon of paint in road-marking paints, the National Bureau of Standards has issued new specifications for such paints, for the purpose of standardizing the quality of these paints made from these natural resins.

Glues.—Hide glues are still in brisk demand, with high grade material scarce and the other grades in none too plentiful supply. Prices are being strongly held on all hide material. Bone glues on the other hand, are in fairly liberal supply and in only moderate request.

Naval Stores

General conditions underwent little change last week. The undertone in the South was still regarded as firm despite some irregularity in rosin quotations at times. Recessions in prices were within comparatively small limits. Conservative transactions were still the general rule so far as new business was concerned although the movement into consuming channels appeared to be holding up well, espe-

Paint Makers Foresee Pinch in Oil Use Cut

Careful calculations on the probable effect of the recent amendment to Conservation Order M-71—restricting the use of most animal and vegetable oils in the production of paint, varnish and lacquer to 70 percent of the 1941 and 1940 average—are making it evident that the paint industry will suffer considerable inconvenience ultimately from enforcement of this regulation. But the pinch resulting therefrom will not be felt to any marked degree until next spring.

This is because present stocks of finished paints in the hands of manufacturers and wholesalers will be large enough for requirements within the ensuing six months, if, in accordance with the usual practice, they are built up with even a moderate amount of new manufacturing operations during the winter months, as the quantity of oils so employed in this cold weather period will be relatively small—certainly well below the 70-percent-of-normal limitation.

Consumption of all vegetable oils by paint and varnish manufacturers amounted during 1940 to 434,736,000 pounds and during 1941 to 570,802,000 pounds, making the average consumption by these interests for both years 502,769,000 pounds. Seventy percent of this average would be 351,938,200 pounds. For the first half of this year, the paint industry's consumption has reached 282,278,000 pounds and, if manufacturing operations in the second half of this year and the first half of next year were figured as running at the same rate, an aggregate of 564,556,000 pounds would be indicated as needed by the trade for the ensuing year while only 351,938,300 pounds would be available under the terms of the regulation.

cially in war industries. The use of rosin and turpentine in other fields has apparently diminished to some extent recently but not sufficiently to bring about any material modification of ideas as to the probable consumption during the remainder of the current naval stores year.

Government holdings of rosin and turpentine under the stockpile purchasing program continue to grow, though the increase of late has not been as rapid as it was a while back when open market quotations were considerably lower than those now ruling. Reports concerning production seem to point to some falling off in the movement from the woods to marketing centers in the not distant future and it continues to be pointed out that the movement during the winter months this season may fall well below the output in the corresponding period last season owing to the increasing scarcity of labor.

The question of sufficient containers for rosin is also being discussed more widely, and the impression now exists in some circles that the quantity of steel available at this time for drum manufacture will not provide for more than half the number of drums likely to be needed during the last quarter of the naval stores year.

Turpentine.—There was apparently no change in the character of business in the local market last week. In some quarters a fair volume of orders was noted for small or moderate lots for prompt shipment, but the total movement for the week was apparently not of much importance. The tone here was steady or firm in the absence of any marked change in primary quotations.

Savannah, Oct. 30.—Following is a record of the turpentine market for the week:—

	Gallons Cents.	Sales.	Barrels Receipts.	Shipments.	On hand.
Saturday*	..	...	...	...	...
Monday	64¼	100	100	173	25,471
Tuesday	64¼	850	82	89	25,464
Wednesday	64½	7,250	135	...	25,599
Thursday	64¼	3,900	69	174	25,494
Friday	64	8,900	49	...	25,443

* No trading.

Jacksonville, Oct. 30.—Turpentine stock, 17,380 barrels.

Chicago—Oct. 30

Turpentine buying fairly active in both wholesale and retail divisions. Movement on orders is moderate. Ruling prices at the close of business last night were:—Five-drum lots, 76c. per gallon; five wood barrels, 81c.; single drums, 79c.; single barrels, 84c.

London, Oct. 30.—Turpentine, 87s. per cwt.

Rosin.—Prices showed some irregularity at times in company with developments in the South, but changes were generally within comparatively narrow limits. Primary offerings continued light. In the local market there was little disposition among buyers to depart from a conservative course in making purchases, but in some quarters a fair inquiry was noted.

Savannah, Oct. 30.—Following is a record of the rosin market for the week:—

	Price per unit—Low of range quoted— *Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
B	...	$3.35	$3.35	$3.31	$3.25	$3.25
D	...	3.40	3.40	3.40	3.40	3.40
E	...	3.47	3.47	3.43	3.43	3.44
F	...	3.51	3.51	3.49	3.46	3.47
G	...	3.53	3.53	3.50	3.48	3.47
H	...	3.53	3.53	3.50	3.46	3.47
I	...	3.53	3.53	3.50	3.46	3.47
K	...	3.54	3.54	3.51	3.48	3.48
M	...	3.55	3.55	3.53	3.48	3.48
N	...	3.65	3.56	3.53	3.50	3.51
WG	...	3.65	3.60	3.56	3.56	3.56
WW	...	3.65	3.65	3.60	3.60	3.60
X	...	3.65	3.65	3.60	3.60	3.60

	Barrels				
Sales	...	312	130	346	206	135
Receipts	...	120	470	360	159	282
Shipments	...	58	4	160	401	500
Stocks	...	...	...	...	...	86,944

* No trading.

Jacksonville, Oct. 30.—Rosin stock, 164,641 barrels.

Chicago—Oct. 30

Rosin remains quiet. Ruling prices at the close of business last night in five-drum lots:—B grade, $4.56 per 100 pounds net; G grade, $4.78; M grade, $4.80; W. W. grade, $4.85.

London, Oct. 30.—Rosin, W.W., 33s. per cwt.

Other Naval Stores

Pine Oil.—Firm tone continued to prevail. Domestic consumption steady and liberal. Supplies apparently light on spot.

Rosin Oil.—Market stronger. Quotations advanced 3c. per gallon. Stocks in hands of consumers apparently light or moderate. Trade fairly active.

Tar.—Steady at recently prevailing levels. Contract movement holding up well. New business fairly active.

Tar Oil.—Increased inquiry for moderate lots from local and other consumers. Market firm.

— OPD : 72d Year —

Wesco Gives Stanford Leave for WPB Board

D. K. Stanford, has been granted a leave of absence as manager of sales promotion and the advertising department of the Wesco Waterpaints, Inc., East Boston, Mass., to become affiliated with the War Production Board in Washington. He will be a junior industrial analyst in the aqueous coatings unit of the protecting coating section of the Chemical Branch, Wesco have factories and branches in Berkeley, Calif., Los Angeles, Portland, Ore., Seattle, Wash., Good Hope, La., Sydney, Australia, Kansas City, Atlanta, Chicago, New York, and Montreal.

D. K. Stanford

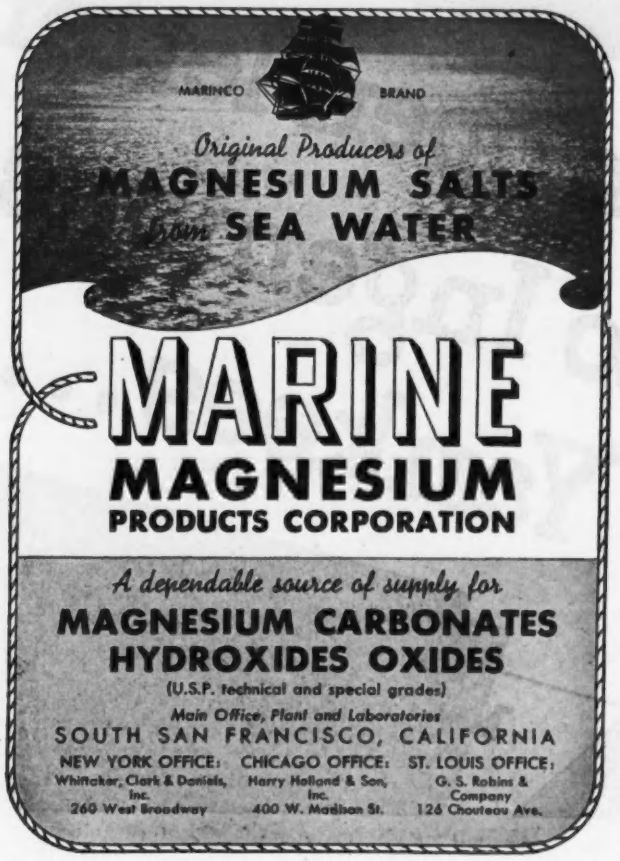
— OPD : 72d Year —

Masury & Son Merged With H.B. Davis Co.

John W. Masury & Son, paint manufacturer, Brooklyn, has merged with the H. B. Davis Company, Baltimore, Md., to form John W. Masury, Inc., of Baltimore, Md., with general offices at Sharp & Ostend streets, Baltimore. The officers of the new company are:—

President, H. Braith Davis; executive vice-president, Alan E. Turner; sales vice-president, J. W. Johnson; treasurer, H. J. Hoeck; and secretary, E. F. Goldfuss.

Ralph A. Sturges, jr., president of the John W. Masury & Son, and John M. Sturges, his brother, will not be active, due to the fact that they are both now in the U. S. armed services. They will, however, retain a financial interest in the new corporation.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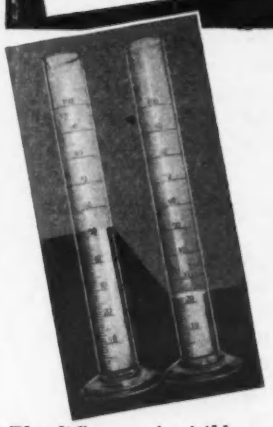
LABORATORY CONTROL makes the difference!



FLUFFIER, FINER METASAP assures greater volume. Here's actual photographic proof! Metasap (in Graduated Glass Cylinder at left) weighs exactly the same* as competitive metallic soap (right). Yet Metasap registers volume of 52 cubic centimeters . . . coarser competitive product has volume of 23 cubic centimeters.

* Each sample weighed 10 grams.

The difference is visible to the naked eye. More important—see the difference it makes in your products . . . in easier, better manufacture. An exclusive method of Laboratory Control assures *positive* control of top quality raw materials, cleaner washing and maximum water insolubility. Write for samples, a glance tells you the story.

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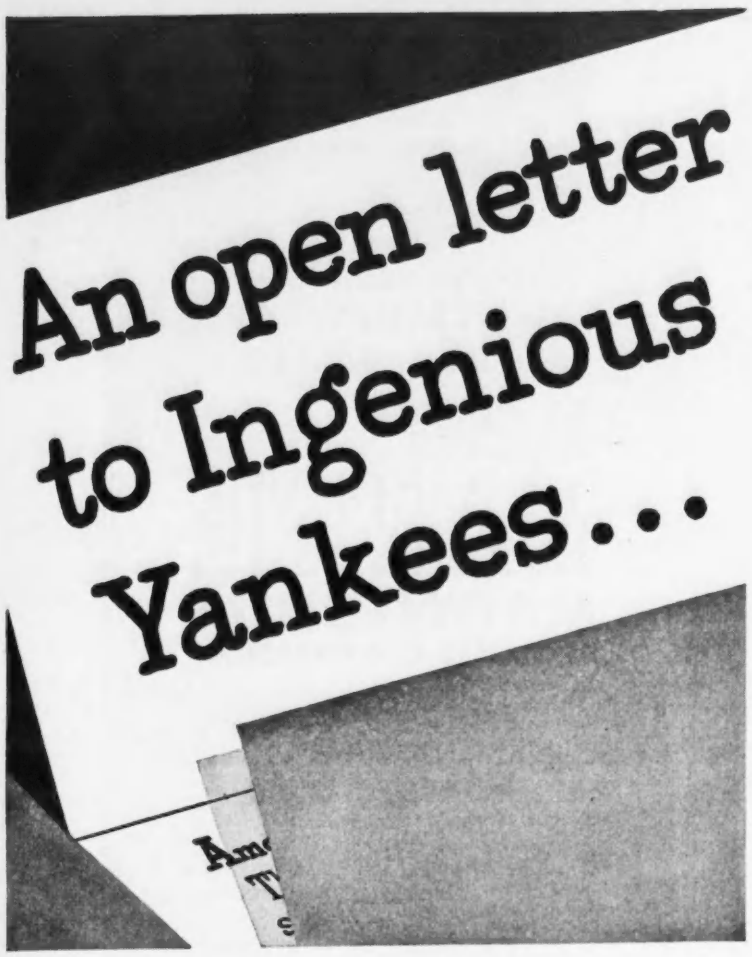
A Division of National Oil Products Company



Americans fight best when the going is tough.

The tradition of squared jaw and rolled-up sleeves stems from the lean settlers, hard as pine knots, who hewed this country from the wilderness. For Yankee ingenuity has always "found a way."

That is why today, when many manufacturers find their raw materials pre-empted by war, there is little wringing of hands, but tremendous activity in digging out new ways to do the needed job with non-critical materials.

We at Barrett are mindful of this situation.

On the one hand, dozens of our products derived from coal-tar are forging America's weapons of war. And on the other, our laboratories and technical people are working day and night, uncovering new and, often, better ways for carrying on production of essential consumer goods.

If you are faced with a raw materials problem, why not supplement the ingenuity of your own engineers with the rich experience of our technical men? Between them, they may be able to work out an available substitute for your critical material. Just write a letter, outlining your problem, to Barrett Technical Service Bureau...We shall be glad to help.

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Coaltar Chemicals

Coaltar Intermediates Continue in Tight Position Due to Short Amounts of Basic Products Available—Benzol Movement To Government Stockpile in Considerable Volume

Intermediate manufacturers in the coaltar chemicals market continued last week to experience much difficulty in securing basic products in necessary volume to comply with the needs of consumers. Benzol, which has been in a very tight position for some time as regards supplies, continued to show signs of further reductions in amounts available for anything but most essential uses.

Large amounts of benzol were moving out to the stockpile that is being built up for use in the synthetic rubber program and allocations were granted in full for use in the manufacture of phenol, cumene, anilin, diphenyl and denaturants, but only in part for use in dyes and intermediates (80 percent) and in solvents for paint and lacquer thinners (40 percent), while no material was allocated for use in paint and varnish remover, drycleaning compounds, type wash and similar uses.

Other basic products in general remained in very short supply, but the heavy production of crude naphthalene, coupled with the seasonally light demand for refined, allowed ample supplies of this item to care for the currently higher output of phthalic anhydride.

It is believed rather generally in the trade that any appreciable upturn in the demand for coaltar colors for civilian goods will find factors unable to respond satisfactorily. Little material has been needed for civilian goods for some time, but the call from mills holding government contracts remains at an active level.

The steel industry last week set its third consecutive new record for production with a rate of 101.1 percent of capacity compared with 101 percent in the previous week and 99 percent in the corresponding week a year ago, the high mark for 1941.

Basic Products

Benzol.—Material continues in very tight supply with less and less for nonessential uses. Government takings for stockpile to be used in connection with synthetic rubber program heavy. Aviation gasoline needs in large volume. Estimates of byproduct cokeoven operations in week ended October 24 indicate production from that source of 1,729,900 gallons of benzol.

Phthalic Anhydride

While total production of phthalic anhydride in 1943 is expected to amount to considerably more than that of this year, factors in the trade point out that current production schedules are likely as heavy as any levels to be reached in the year to come. Some interests inform that they have not made shipments on anything under A-rated orders since the beginning of this year.

Phthalic anhydride has been under allocation since October 1. As the material is a coaltar product derived from naphthalene, it is interesting to note that crude naphthalene is also under allocation. Contracts on the latter for 1943 are being written at a good rate at prices unchanged from levels that have prevailed for some time. Seasonally light demand for refined naphthalene coupled with heavy production of crude is resulting in a currently satisfactory supply situation in this quarter and it is believed in the trade that supplies of naphthalene for phthalic anhydride will prove adequate over 1943.

In issuing General Preference Order M-214, covering phthalic anhydride, the War Production Board pointed out that it was deemed advisable that large war needs for munitions manufacture, protective coatings, and plastics, as well as smaller requirements for medicines, food preservatives, and other essential civilian needs should not be jeopardized by diversion of this chemical to undesired purposes.

One of the principal uses of phthalic anhydride is in resin manufacture and a WPB directive of October 15 has prohibited the shipping of any alkyd resins on any orders with lower than AA-4 rating.

Price Changes

Advanced
None

Reduced
None

Comparative Values

Index numbers compiled from twenty typical coaltar products on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
130.1	130.1	130.1	128.5

Market news that may have developed after this report was sent to press will be found on page 4.

Coaltar.—Consumers' needs at recent levels. Quotations hold steady. Estimates of byproduct cokeoven operations in week ended October 24 indicate production from that source of 14,558,700 gallons of coaltar.

Creosote Oil.—Major utilities and railroads remain prominent among consumers. Market firm. Supplies remain tight. Estimates of byproduct cokeoven operations in week ended October 24 indicate production from that source of 770,000 gallons of creosote oil.

Cresylic Acid.—Position unchanged. Pricewise, no alterations.

Naphthalene.—Demand for balls and flakes continues seasonally light. Crude output in considerable volume. Allocations govern crude transactions with phthalic anhydride production schedule heavy. No change in quotations. Estimates of byproduct cokeoven operations in week ended October 24 indicate production from that source of 1,624,300 pounds of crude and refined naphthalene.

Phenol.—Allocations rule. Lend-lease shipments consuming large quantities. Little for intermediates with plastics and synthetic resins taking material in considerable volume. Prices show no change. Estimates of byproduct cokeoven operations in week ended October 24 indicate production from that source of 216,500 pounds of phenol.

Pitch, Coaltar.—No new developments. Prices same.

Pyridin.—Practically nothing to be had in spot market. Allocations govern transactions. No change pricewise.

Tar Acid Oil.—No change in market position. Price schedules steady.

Toluol.—Little to be had except for most essential needs. Heavy movement to war channels. Priorities rule with material under allocation. Derivatives' supply situation remains short. Prices stabilized. Estimates of byproduct cokeoven operations in

—*Continued on page* 65

Current prices on coaltar products are given in the alphabetical list of prices beginning on page 9

Washington Talks It Over

—*Continued from page* 5

diapers, says WPB, is more than sufficient to take care of the increasing national birth rate.

It is possible there may be shortages of certain types or sizes in individual stores, a qualifying paragraph in the statement adds—to keep the board from getting too far out on the limb—but there should be no scarcity in the general availability of diapers in view of current production.

Papain Going Back Home

Cuba, which is the natural habitat of the papaya fruit, is taking steps to reintroduce the cultivation of this plant on a large scale and to take over, as far as possible, the supplying of the United States with papain. Production of papain, says the Rockefeller Inter-American Affairs Office, may be many times the 220 pounds produced in 1941.

The papaya, sometimes called the tree melon, known to science as the *Carica papaya*—is one of a long list of indigenous New World plants, such as quinine and rubber, which has been successfully exploited commercially in the Far East. Papain, which is easily obtained by cuts in the skin of the fruit and catching the latex in a cup, has a digestive enzyme resembling pepsin. It has many commercial and medicinal uses, including the treatment of diptheria and to make tough meat tender. Ceylon and other Far Eastern sources now cut off by the war have been our principal supply sources.

Where the Workers Are

The War Manpower Commission in its search for workers to keep the factories of essential industries operating might well look to the personnel records of the Federal government and the State governments for a big reservoir.

Representative "Mike" Monroney of Oklahoma has done a little research in the matter and has found that the manpower problem to a large extent is one of the government's own creation. While the size of the armed force is about 25 percent greater than in the first World War, the number of men and women on the Federal payroll is 280 percent greater and the State and local governments have about 100 percent more.

One of the fastest-growing agencies is OPA. There were 85 people on its payroll eighteen months ago; 4,436 six months ago; and today there are over 40,000—and this does not include volunteers. These number about 50,000 workers.

Rushing Along Slowly

The wartime 35-mile speed limit produces a new road hazard to car drivers which might well be kept in mind if serious accidents are to be avoided. Passing a car without going over the 35-mile limit is quite a different thing from passing with open throttle, because it will take just about twice as much distance and twice as much time, warns the American Automobile Association.

For example, if two cars are going down the road at 30 m.p.h. the following car could, under normal circumstances, accelerate to 45 m.p.h. and pass within about ten seconds and within 500 feet. However, when passing at a speed of not more than 35 miles an hour, 900 feet of road space is needed and about 18 seconds would elapse before getting back into the proper lane. If the first car is going 32 m.p.h., about twenty-seven seconds —nearly half a minute—and 1,300 feet —about a quarter of a mile—is needed if Uncle Sam's new speed limit is not to be exceeded.

A good rule to follow is: Don't pass unless the vehicle ahead is going 30 m.p.h. or less, and then pass only when the assured safe distance ahead is twice as long as usual. The best rule is—What's the rush?

— OPD : 72d Year —

Dyestuffs Order M-103 To Be Discussed Nov. 6

Dr. Arnold Lippert, of the War Production Board, will discuss the dyestuff conservation order M-103 at a meeting of the New York Section of the American Association of Textile Chemists and Colorists in the Downtown Athletic Club, 19 West street, this city, November 6. Reservations are in charge of the secretary of the section, N. A. Johnson, 440 Fourth avenue. His telephone number is Murray Hill 5-0375.

— OPD : 72d Year —

Consulting Chemists Ass'n Elects Officers

—*Continued from page* 4

Mid-Town Coal Laboratories; secretary, William C. Bowden, jr., of Ledoux & Co.

Directors for three years:—Philip P. Grey, of Wallerstein Laboratories; I. F. Laucks, of Laucks Laboratories, Seattle, Washington; C. Weaver, of the Industrial Testing Laboratories; to serve for two years, Erwin Di Cyan, of Di Cyan & Brown.

The meeting was featured by a symposium on "The Consulting Chemists and Chemical Engineer in War and Peace." W. J. Schepp, of the Shepp Laboratories, Inc., addressed the meeting on "The Consultant and Industry or the Practical Catalyst," in which he dealt with the application of civilian goods to war uses and covering specially the fields of colloids, powder metallurgy and bacteriostatic phase in connection with the sulpha group.

— OPD : 72d Year —

Earth Colors Industry Advisory Group Formed

OPD Washington Bureau

An advisory committee for earth colors has been appointed by the War Production Board. E. H. Bucy, chief of protective coatings section, Chemicals Branch, has been named the government presiding officer. Committee members are:

Reid L. Carr, Magentic Pigment Company, Trenton, N. J.; J. W. Bossert, Reichard-Coulston, New York; F. B. Havens, Prince Manufacturing Company, Bowmanstown, Pa.; John Starinn, American Pigment Company, Hiwassee, Va.; Wilbur Lucking, C. K. Williams & Co., Easton, Pa.

Coaltar Chemicals

Basic Products

—*Continued from page* 64

week ended October 24 indicate production from that source of 745,900 gallons of toluol.

Xylol.—Good demand. Material under allocation. General limitation order in effect. Prices stabilized. Estimates of byproduct cokeoven operations in week ended October 24 indicate production from that source of 168,400 gallons of xylol, crude and refined.

Chicago, Oct. 28.—Trade in coaltar bases continues relatively good in a routine fashion. This is making for generally firm and steady tone for virtually all products. War demands seem to be taking up a steadily increasing portion of material. Ruling prices exclusive of tax are:—Benzol, 90 percent, 15c. per gallon; toluol, 28c.; 10-degree xylol, 27c.; solvent naphtha, 27c.; creosote oil, grade 1, 15½c.

Hydrogenated Solvents

Cyclohexane. — No new features. Prices unaltered.

Cyclohexanol.—Demand good. Supplies light. Quotations steady.

Cyclohexanone.—Material in active demand. No alterations pricewise.

Methylcyclohexanol. — Consumers' needs heavy. Prices same.

Coaltar Acids

Anthranilic. — Position unaltered. Quotations steady.

Benzoic, Technical. — Market tone firm. No alterations quotably.

Broenner's.—No new developments. Material quotably unchanged.

Cleve's.—Demand at recent levels. No movements pricewise.

Fumaric.—Consumers' requirements remain at recent levels. Quotations show no change.

Gamma.—Position shows no change. Prices same.

H.—Demand continues unaltered in firm market. No price changes.

Laurent's.—No fluctuation in level of interest. No alterations pricewise.

Ships, planes,
guns, tanks
start in a coal mine

Our whole civilization is based on coal, and our whole *defense* of that civilization is based on it. Coal provides heat. Gasoline can be made from coal. Rubber is made from it. Many vitamins are coming from coal's derivatives.

Coke made from coal is indispensable to steel. Railroads consume one out of every five tons mined. Dozens of vital industries look to it for one or more of the 150,000 chemical compounds already identified through coal carbonization.

Koppers is one of the nation's largest producers of domestic, industrial, and coking coals. Koppers builds most of the coke ovens which carbonize millions of tons of coal . . . is an important producer of coal tar chemicals for war . . . of anti-aircraft gun mounts, airplane catapults . . . airplane, submarine, diesel and automobile piston rings . . . Fast's Couplings for power transmission . . . pressure-creosoted timber, ties and piling . . . and dozens of other products.—Koppers Company, Pittsburgh, Pa.

KOPPERS

THE INDUSTRY THAT SERVES ALL INDUSTRY

Maleic.—Undertone similar to that of recent weeks. Level of activity, demand unchanged.

Malic.—No new features in market. Quotations steady.

Picramic.—Market devoid of new developments. No change quotably.

Picric.—Tone unaltered. No change as regards prices.

Sulphanilic.—Good interest maintained. Price schedules hold steady.

Salicylic, Technical.—Demand and prices at recent levels.

Tobias.—Position unchanged with quotations well maintained.

Other Intermediates

Alphanaphthol. — New developments lacking. Prices same.

Alphanaphthylamine. — Demand active. Quotations steady.

Anilin.—Allocations govern transactions. Supplies of oil and salts continue tight. No change quotably.

Anthraquinone.—Position unaltered with no change in price schedules.

Benzaldehyde. — Supplies tight. Demand at recent levels. Quotations firm.

Benzidin Base.—Active call against tight supplies. Prices same.

Betanaphthol.—Supplies very tight. Market has firm undertone. Quotations well maintained.

Diethylanilin. — New developments lacking. Prices confirmed.

Dimethylanilin. — Production inadequate to cope with steady demand. Quotations steady.

Dinitrobenzene.—Supplies short. No change pricewise.

Dinitronaphthalene. — Tone same. No alterations in price schedules.

Dinitrotoluene. — Little available. Producers hold price schedules unchanged.

G. Salt.—No change in level of activity. No alterations pricewise.

Metanitroanilin. — Offerings very limited. Firm undertone.

Metaphenylenediamine.—Under allocation, effective November 1. Demand active. Little to be had. Prices same.

Metatoluylenediamine.—Under allocation, effective November 1.

Nitrobenzene.—Tight position unaltered. No change quotably.

Orthocresol.—Allocations rule. Quotations show no change.

Parachlorophenol.—Stocks continue low. Price schedules well maintained.

Paradichlorobenzene. — Supplies very tight with no relief looked for. No change quotably.

Paranitrophenol. — Supplies short. No price movements.

Phthalic Anhydride. — Production schedules heavy. Material under allocation and use control. Quotations firm, unchanged.

Xylidin.—No change in market tone. Prices steady.

Coaltar Colors

Demand for coaltar colors continued active from mills holding government contracts, but needs for civilian goods remained at the light levels that have prevailed for some time. It is rather generally regarded in the trade that any appreciable upturn in the latter would find producers unable to comply due to short supplies of bases. War needs, of course, are consistently being given first consideration. No revision in price schedules were observed last week.

— OPD : 72d Year —

A.P.C. Seizes Jungmann And S.K.S. Dyestuff

—Continued from page 3

pally in the import of silk and the export of cotton.

Saint-Denis, Kuhlman, Saint-Clair Dyestuffs Corporation, 55 Vandam street, New York, with branch offices in Georgia and agents in Boston and Providence, was organized in 1939 for U. S. importation of products of the French Dyestuff Combine. Since the German invasion of France in 1940 the four large companies making up the combine have come under control of Germany's I. G. Farbenindustries, A. G.

— OPD : 72d Year —

Horsch New York BEW Chief

L. L. Horsch, who recently served with the Technical Data Section of the Board of Economic Warfare, has succeeded Col. I. W. Hardenbergh as chief of BEW's New York office.

Pen-Chlor Patent Interest of I.G. Vested

—Continued from page 3

income, profits, royalties and other property heretofore accrued or which may hereafter accrue to or in favor of said I. G. Farbenindustrie, A. G., by virtue of the aforesaid contract, which contract relates to certain United States patents, including those described as follows:—

Pistor:—Drying calcium hypochlorite compounds; producing calcium hypochlorite compounds.

Schultz:—Preserving dibasic calcium hypochlorite.

Reitz:—Improvement in storing qualities of calcium hypochlorite; recovery of calcium hypochlorite; recovery of calcium hypochlorite; manufacture of bleaching powder; recovery of basic calcium hypochlorite compounds.

The Alien Property Custodian announced that he also vested all right, title and interest of said I. G. Farbenindustrie, A. G., in a contract dated November 1, 1933, between I. G. Farbenindustrie, A. G., and Pen-Chlor, Inc., together with all income, profits, royalties and other property heretofore accrued or which may hereafter accrue to or in favor of said I. G. Farbenindustrie, A. G., by virtue of the aforesaid contract, which contract relates to certain United States patents, including those described as follows:—

Fendt:—Electrical inductive and resistance heating device.

Frank:—Process for preparing acid-proof cementing or lining compositions; cement powder and mortar powder; acid-proof material and process of preparing it; acid-proof self-hardening compositions.

Gramburg:—Acid-proof cementing compositions and preparing same.

Dietz:—Acid-proof cementing composition; acid-proof mortar for digestors; acid-proof self-hardening compositions; acid-proof cement mortars; water glass cement powder and cement mortars produced therefrom; resinous cement rapidly hardening in the cold and making same; cement powders and method of producing acid-proof mortars therefrom; self-hardening cement for spark plugs.

— OPD : 72d Year —

Insecticide Packaging Standards Revised

—Continued from page 3

facturers submitted a second revision, further enlarging the scope of the recommendations to include packages for nicotine sulphate. This second revision was made effective August 1, 1940.

The current (third) revision, which has been approved by a large majority of the manufacturers as well as a representative group of distributors and users of agricultural insecticides and fungicides, it was stated, consists primarily in the substitution of fiber containers to conserve metal, and in the elimination of several types of packages. Also, a simplified schedule of recommended standard packages for dry lime sulphur has been included in this revised simplified practice recommendation which will now be identified as R41-42.

Until printed copies are available, mimeographed copies of the simplified practice recommendation R41-42 may be obtained without charge from the division of simplified practice, National Bureau of Standards, Washington, D. C.

— OPD : 72d Year —

G.S. Furman Nominated For C.S.A. Presidency

Gerald S. Furman, of Merck & Co., has been nominated for the presidency of the Salesmen's Association of the American Chemical Industry, to succeed C. O. Lind, of the Dow Chemical Company, whose term of office expires at the close of 1942. Mr. Furman has been serving as vice-president. Other nominees are:—

Vice-president, Phil LoBue, of the Michigan Chemical Company; treasurer, Frank Fanning, of N. I. Malstrom & Co., and secretary, Charles A. Alexander, of Selder & Enequist Company.

Mr. Furman has been manager of the New York office for Merck & Co., manufacturing chemists, Rahway, N. J., since July 1, 1941, assuming that post after serving as assistant manager for three years. He started with Merck & Co. in 1921 in the pricing department and in 1927 was assigned to the Montreal branch of the company, after seven months, he was transferred to the Rahway office and later became a member of the industrial sales department. He served then as assistant to G. A. Beauchamp for several years, in charge of sales to pharmaceutical, proprietary and cosmetic customers. In 1936 he was named assistant manager of the New York office.

— OPD : 72d Year —

Esther Engle Joins Commercial Solvents Corp.

Miss Esther A. Engle has joined the technical service division of Commercial Solvents Corporation at Terre Haute, Ind. The duties of this division include the introduction of the company's new products and the preparation of technical literature and advertising.

Before joining the Commercial Solvents staff Miss Engle was head of the chemistry department of Cedar Crest College, Allentown, Pa., a position she had occupied for fourteen years. She was also chairman of the Lehigh Valley Section of the American Chemical Society. Miss Engle received an A.B. degree from the University of Illinois, the B.S. from Illinois Wesleyan University, the M.A. from Columbia University, and has done further post-graduate work.

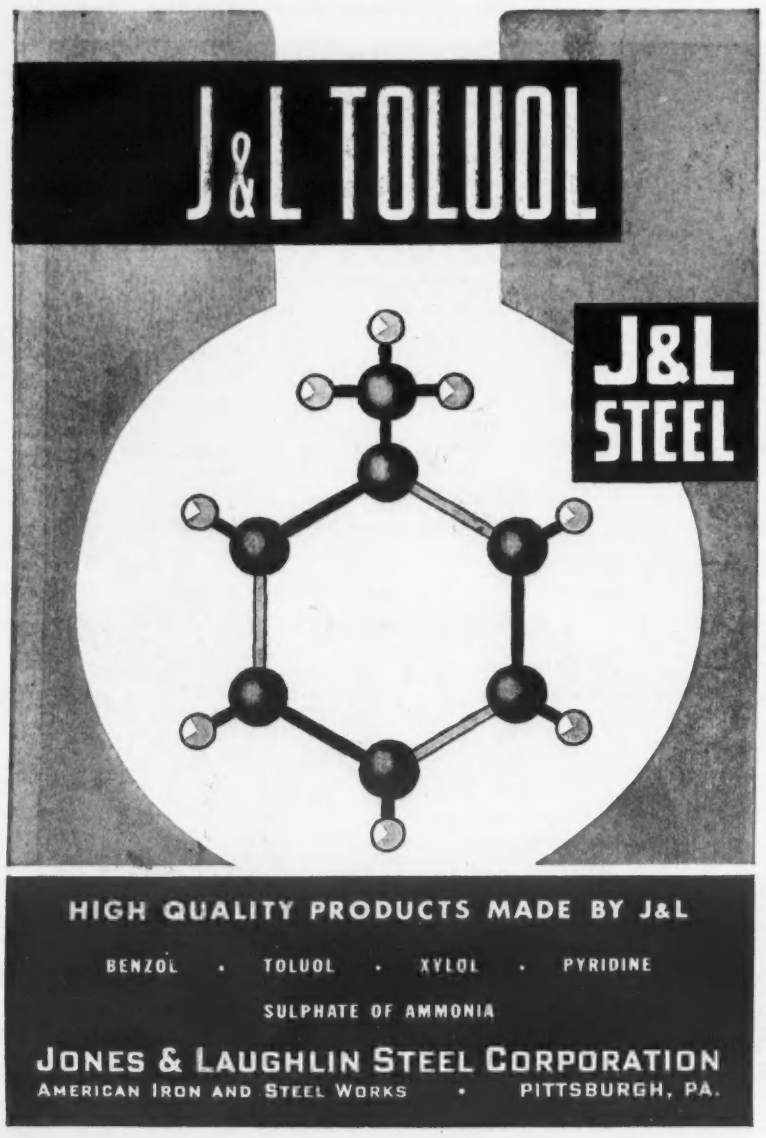
— OPD : 72d Year —

American Home Products Dickering with Harmon Color

Negotiations are in progress between the American Home Products Corporation, Jersey City, and Harmon Color Works, East Paterson, N. J., for the amalgamation of the two concerns. The objective beyond the contemplated amalgamation is the acquisition by the American Home Products Corporation of plant facilities for the production of "sulfa drugs" and other synthetic organic medicinal chemicals.

— OPD : 72d Year —

Buy War Stamps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Pale 99/100% American duty free Cresylic Acid, distillation range about 208/235° C.

This is the first time in history that highly refined tar acids of this type have been made available on a large scale, and remarkably good results are being obtained by our many American buyers.

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Oils, Fats, and Waxes

Crude Cottonseed Oil Sales at Ceiling Prices—Refined Oil Dull —Flaxseed Receipts Smaller—Sperm Oil Control Tightened —General Market Firm Though Quiet

A firm tone continued to prevail in the market for vegetable, animal and fish oils, fats and greases last week although there was little to record in the way of activity. Inquiries were not absent but business was hampered by the lack of adequate supplies and government restrictions of one kind or another which have a tendency to create uncertainty and hesitation among both buyers and sellers.

Trading in refined cottonseed oil futures remained practically at a standstill, and speculative operations in lard, flaxseed and soybeans continued on a small scale, the inactivity in these markets apparently finding more or less reflection in all branches of the oils and fats trade. Transportation and storage difficulties are interfering with the movement of the large oilseeds crops. In the Northwest flaxseed shipments were under embargo and receipts at terminal points fell off.

Sperm oil control was further tightened by the allocation of deliveries to the armed forces of the nation, as supplies are light and diminishing. Control over other oils and fats was revised by an amendment to the existing order M-71, this action being taken to increase supplies available for military purposes.

Vegetable Oils

Babassu.—Maintained at the ceiling. Little oil available on spot. Inquiries noted. Market firm.

Castor, Dehydrated.—Steady contract movement. New business curtailed by government restrictions and uncertainty concerning future supplies. Tone firm.

Chinawood.—Increased movement of moderate lots noted through government channels. Market remains firm.

Coconut. — Quiet conditions continued to prevail here in absence of offerings. Little reported available on Pacific coast. Quotations nominal.

Corn.—Crude offerings light. Inquiries reported. Market firm.

Cottonseed.—Consumers purchasing for current needs. Fair movement of moderate lots. Tone firm.

Mustard.—Inquiry good. Consumption apparently on increase owing to shortage of other vegetable oils.

Oiticica.—Quotations maintained at recently prevailing levels. Frequent inquiries. Supplies light. Future arrivals uncertain.

Sunflower Seed

Production of sunflower seed in this country in 1942 is expected to be the smallest since 1930, according to the Department of Agriculture. The crop is estimated at 2,562,000 pounds against 7,470,000 pounds in 1941 and a ten year average of 4,555,000 pounds. The marked decrease in production this year is attributed chiefly to a sharp reduction in acreage in the three principal states, California, Missouri and Illinois.

Prices for sunflower seed to growers had not been established up to October 12. Some California seed was contracted for at $3.75 per 100 pounds, but prices of uncontracted seed were expected to open at $4 to $4.50 per 100 pounds. Last year the opening price in California was $2.50 per 100 pounds. Carryover of sunflower seed by growers and dealers is considered to be negligible.

A superior variety of sunflower which has a high oil content and yields about 800 pounds of seed an acre has been developed in Canada. Agricultural organizations have suggested that the Government collect the 240,000 pounds of seed expected from this year's plantings to increase the 1943 acreage. About 50,000 acres yielding 5,000,000 pounds of seed could be planted in 1943 if farmers, mainly European immigrants, could reserve some of this year's seed instead of consuming them as food.

Price Changes

Advanced

None

Reduced

None

Comparative Values

Index numbers compiled from twenty-three typical oils, fats and greases on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
191.7	191.7	191.4	170.2

Market news that may have developed after this report was sent to press will be found on page 4.

Olive.—No broadening of trade. Movement apparently made up of comparatively small lots. Imported oil in light supply. Prices stationary.

Olive Foots.—Quiet in absence of offerings. Inquiries noted. Prices nominal.

Palm.—Business curtailed by inadequate supplies in hands of sellers

Palm Kernel.—According to a report from London, efforts are being made by the British government to increase production of palm and palm kernel oil by raising payments to native African gatherers of nuts and kernels.

Peanut.—In light supply and quiet here. More doing in crude in parts of the South. Rains interfered with peanut harvesting and threshing recently.

Perilla.—Most quarters bare of supplies. Market quiet at the ceiling.

Sesame.—Scarce here. Limited quantities of domestically produced oil reported available in Pacific coast market.

Shortening, Vegetable. — Contract movement steady. New business fairly active. Market firm.

Soybean.—Offerings light for spot and nearby delivery. Reports of increased transactions for later shipment. Market firm. Bean receipts still below expectations, recent government rulings concerning purchases by mills apparently being without material effect upon movement as yet.

Sunflowerseed. — Local offerings lacking. Indications point to the smallest seed production in this country in 12 years owing to a material reduction in acreage.

Teaseed.—Supplies small. Market firm. Quoted in a nominal way at 29c. per pound for crude and 32c. for refined.

Markets at Other Centers

Chicago—October 30

Steadiness is noted in most sections of the vegetable oil market. Activity is rather limited currently, with buyers displaying considerable reluctance to desert the hand-to-mouth basis of purchases recently noted. Ruling prices are:—Coconut oil, crude, Pacific Coast, 8c. per pound. Corn oil, crude, mills, 12¾c. per pound; refined, edible oil, 15¼c. to 15½c. per pound, drums, car lots; 15¾c. to 16c., drums, less than car lots. Peanut oil, crude, 13c. to 13⅛c. per pound. Soybean oil, crude, 11¾c. per pound.

The market for soybeans on the Chicago Board of Trade was quiet. Price movements were narrow. Following is a soybean price record, per bushel, for the week:—

	High	Low	Closing Oct. 30	Closing Oct. 28
Dec.	$1.60⅞	$1.60⅛	$1.60⅞	$1.61¼
May	...	...	1.65	...

San Francisco—October 28

The market in vegetable oils again held steady last week and there was no particular change noted either in offerings or in demand, which was more or less moderate. Practically all oils remain at ceiling heights.

Castor.—No. 1 at 17c. per pound, Coast drums. Dehydrated, unbodied, at 20c.; bodied at 21c. Offerings fairly plentiful.

Chinawood. — Nominal at 37½c. per pound, tankcars.

Coconut.—Named at 8c. per pound in tankcars.

Cottonseed, Bleachable. — Quoted at 14.15c. per pound in tankcars, f.o.b. San Francisco.

Oiticica.—Offerings of liquid oil at from 23c. to 25c. per pound in drums.

Sesame.—Sellers are quoting 15c. per pound in tankcars for crude grade, f.o.b. San Francisco.

Soybean.—Crude grade named at 12.65c. per pound in tankcars, f.o.b. Pacific Coast.

Linseed Oil

Local and outside markets continued rather quiet so far as new business was concerned. Contract movement somewhat lighter.

Linseed Oil.—The local situation lacked features of striking interest last week. Changes in flaxseed quotations were generally unimportant and oil prices were held at previous levels with the tone of the market steady. No broadening of trade was noted although inquiries were not lacking.

Announcement was made from Washington of an amendment to Conservation Order M-71 permitting wholesale dealers in linseed oil to sell to persons other than manufacturers no more than 80 percent of the amount sold during the base period. The amendment enables any person to sell linseed oil without restriction to the army, navy or for lend-lease purposes, and reduces the amount he may deliver to others to 70 percent. Opinions differed as to what effect, if any, this order would have upon the volume of business in linseed oil among dealers.

The movement of oil on contract from local mills was apparently up to that of recent preceding weeks though consumption in painting operations appears to have slackened recently. Advices from outside milling centers reported new business as quieter and contract shipments also smaller. Operations at the mills, however, continued at capacity in most cases as crushers are said to be desirous of building up reserve supplies.

The movement of flaxseed to terminal points in the Northwest showed a decrease as a result of the recent embargo against shipments from the country owing to a lack of storage space. The demand for the lighter cash offerings was good. The quality of the seed was reported as better than expected in view of the unfavorable weather that prevailed over the Northwest a while back. Of late temperatures have been lower but in the absence of precipitation the work

Current prices on animal, vegetable, and fish oils (under Oil), fats and greases (under Grease) are given in the alphabetical list of prices beginning on page 9

STEARIC ACID
Single Pressed and Double Pressed
Available in either cake or flake form
Triple Pressed
IVORY BRAND

RED OIL
(OLEIC ACID)

RUBY OLEINE BRAND (*distilled*)
STAR BRAND (*saponified*)
CANARY BRAND
(*very pale yellow, especially suitable for best types of dry cleaners' soaps.*)

PROCTER & GAMBLE
MAIN OFFICES
Gwynne Bldg., Cincinnati, Ohio
220 East 42nd St., New York City
Branches and stocks in all large cities

Stearic Acid Oleic Acid Fatty Acids
(RED OIL)
A. GROSS & CO., 295 Madison Avenue, New York, N. Y.
ESTABLISHED 1837 FACTORY: NEWARK, N. J.
ASHLAND 4-8251 CABLE: GROSSRAY

THE BRODÉ CORPORATION
MEMPHIS, TENNESSEE
Domestic and Export
PRODUCTS OF COTTONSEED PEANUTS and SOY BEANS
Members—Memphis Merchants Exchange (Futures in Cottonseed Meal); New York Produce Exchange (Futures in Cottonseed Oil)
Codes: Yoppe, Robinsons, Bentleys A B C, 5th Edition Peerless

EMERY
America's largest producers of
STEARIC and OLEIC ACIDS
All Grades Saponified and Distilled
FATTY ACIDS · GLYCERINE · PITCH
SPECIAL FATTY ACID DERIVATIVES
Since 1840
EMERY INDUSTRIES, INC.
Originators of Twitchell Process
New York CINCINNATI, OHIO Lowell, Mass.
Stocks in All Principal Cities

of gathering and threshing the crop has been pushed.

Threshing in Canada has also been active under favorable weather conditions. The next official estimate of the Canadian yield will be issued in about two weeks. Meantime negotiations for the purchase by the American government of the Canadian crop surplus are in progress. Crop news from Argentina continued favorable. On the basis of a recent estimate of the Argentina exportable surplus, the probable carryover in that country at the end of the current calendar year is put at about 60,000,000 bushels.

Minneapolis, Oct. 30.—No great change in the oil situation developed through the week and the current market is rather quiet. Buyers took on a few fill-in lots for quick shipment, but due to the lack of progress in Washington in the matter of settling the agricultural program, interest in deferred delivery failed to attain volume.

Retardation of certain phases of the war effort tended to slow down shipping instructions slightly, but mills are still running at full capacity. Out movement during the week ending today was smaller. New shipping regulations regarding complete loadings of cars will take effect November 1, so it looks as though the actual oil movement will be good though fewer cars are in use. Stocks in the hands of consumers are not large.

Quotations on tankcar lots f.o.b. Minneapolis, 12.2c. per pound; cooperage, car lots, 13.1c. per pound; warehouse lots, 13.5c. per pound.

Shipments of oil in pounds were as follows:—

	1942	1941
This week	4,900,000	3,850,000
Since Sept. 1	47,270,000	42,350,000

San Francisco, Oct. 28.—Linseed oil turned a bit easier during the week, when suppliers reduced their open quotations by two points. Business is along routine lines, with no market feature in particular. Preparations for the new crop in the Imperial Valley were progressing with the possibility there will be a larger acreage than the 104,000 acres planted last year. Some increase also indicated for San Joaquin Valley. Oil quoted:—Tankcars, 12.3c. per pound; drum car lots ex mill, 13.2c.; drum lots ex warehouse, 13.6c.

Chicago, Oct. 30.—Some moderate improvement in undertone is reported in linseed oil. The inquiries have picked up, as indicating better potential demand, while actual business remains rather moderate. Offerings by sellers have been within moderate limits, however. Ruling prices are:—Tankcar, 12.2c. per pound; drums, car lots, 13c.; drums, less than car lots, 13.6c.

STEARIC ACID
OLEIC ACID
(Red Oil)
DISTILLED
FATTY ACIDS
Animal
and
Vegetable
RUFATS
(Hydrogenated
Fatty Acids)
WILSON & CO. INC
WILSON-MARTIN DIV.
SNYDER AND SWANSON ST.
PHILADELPHIA, PA.

London, Oct. 30.—Linseed oil, 46s. 6d. per cwt.

Linseed Meal.—Tone of the local market remained firm. There was a steady contract movement. New business quiet on spot owing to a lack of offerings.

Minneapolis, Oct. 30.—A spell of rather severe Fall weather accelerated the movement of linseed meal and shipments during the week ending today were liberal. Demand for quick shipment offerings improved and prices advanced sharply. There also was improvement in demands for deferred shipment, but crushers were indifferent sellers. Resellers became more independent because of the improvement in the nearby position, so offerings proved moderate to light for all shipment periods. Undertone of the market is strong and some crushers are now behind their shipping instructions.

Quotations on car-load lots, bulk, f.o.b. Minneapolis, $34 per ton; January-March shipment, $34.50 to $35 per ton.

Shipments of meal in pounds were as follows:—

	1942	1941
This week	9,880,000	7,880,000
Since Sept. 1	100,160,000	84,562,000

Chicago, Oct. 30.—Linseed meal is holding its own firmly or even in some cases showing market improvement, with buyers now evincing more interest than for some time. Offerings by resellers are not particularly extensive and the tone generally is good. Ruling prices are:—Round lots, $35 per ton, nominal; car lots, $35 to $36; less than car lots, $37 to $38.

Flaxseed

Domestic flaxseed prices irregular, changes generally being moderate. Foreign markets steady.

Minneapolis, Oct. 30.—The embargo against flaxseed shipments to Northwestern markets took several days to become effective, but now the movement is very moderate and the tone of the market is better. Hedging by country buyers has been resumed, so futures are available when commission houses wish to recover the hedges that are out against cars they sell in the cash department. Altogether the situation is normal and crushers are paying up for good flax on the futures basis.

Buyers wanting supplies for Eastern shipment are able to operate mor freely because enough boats came up the lakes to improve the storage situation at Duluth and Superior, so premiums for choice Northern seed at diversion points are better. Buyers for local unloading are reaching for some of the good Northern seed to mix off with their purchases of Southern seed. This being the case, there is a little competition for the better quality of Iowa and southern Minnesota quality. An average of sales compared with futures shows considerable improvement over the average of last week insofar as prices go.

Farmers had a rather lengthy respite in weather conditions and found shocks and windrows in better shape than expected. Flax arriving on the market currently is quite dry and satisfactory. Loss of oil due to moisture is not as serious as anticipated. However, lack of farm help prevented the producers from taking full advantage of the Indian Summer, so some of the flax is still in fields and weather again turned bad over this past weekend.

Trading in futures was limited. Crushers bought steadily.

TALL OIL
Prime crude, saponifiable
drum lots or C/L
Prompt shipment from stock
A. J. RIMBERG CO.
117 Liberty Street New York

The week's closing flaxseed price range was as follows:—

	Cash	Dec.	May
Saturday	$2.40	$2.47	$2.50½
Monday	2.40	2.46½	2.50¼
Tuesday	2.40	2.45½	2.49½
Wednesday	2.40	2.42¼	2.46¼
Thursday	2.40	2.43¼	2.46¾
Friday	2.44¾	2.43¾	2.48

Crop movement in bushels follows:—

	Receipts		Shipments	
	1942	1941	1942	1941
This week	761,600	209,240	144,200	384,340
Since Sept. 1	12,320,600	5,542,485	1,089,800	967,960

Buenos Aires, Oct. 30.—Flaxseed, $1.24½ per bushel. Exports this week, 103,000 bushels, none to the United States. Total since January 1 as follows:—

To—	Bushels This year.	Last year.
United States	9,211,000	18,563,000
United Kingdom	2,038,000	2,113,000
Continent	667,000	977,000
Orders	.....	.....
Others	150,000	1,395,000
Totals	12,066,000	23,048,000

Visible Supply

	Bushels.
Last week	27,560,000
Previous week	25,000,000
Last year	25,591,000

Hull, Oct. 30.—Flaxseed, Calcutta, £22½ per ton; Bombay, £26.

Cottonseed Oil

Local market for refined oil futures remained dull. Further sales of crude in Southern markets at ceiling prices. Cake and meal firm.

Cottonseed Oil.—Trading in the local market for refined oil futures continued extremely quiet and there was a lack of interesting developments. The open interest in the market October 28 was only 90 contracts. Crude oil remained firm in the South, further transactions being reported at ceiling prices in all sections. Sales for the week were apparently smaller than in recent preceding periods as many of the mills are sold ahead and not inclined to accept additional new business.

Oils and fats which compete with cottonseed oil ruled firm. Offerings of soybean and corn oil for prompt and nearby delivery were still light though distant positions were available at ceiling prices. Offerings of peanut oil were noted early in the week, with further sales, but sellers were scarcer later and, according to one report, there will be no further trading until new peanut allocations are made as holdings among the mills have been cleaned up. An official report stated that domestic production of sunflower seed for the current season will be the smallest in twelve years owing to a sharp reduction in acreage in the West.

The movement of live hogs showed a further increase and hog prices weakened at one time though they rallied later. Arrivals in the principal Western markets for four days of the week aggregated 273,300 head against 241,900 head in the same time in the previous week and 252,669 head last year. The weight of the hogs received in Chicago during the week ended October 24 averaged 229 pounds against 228 pounds in the previous week and 224 pounds last year. In the South, weather conditions were favorable for pushing the work of gathering the cotton still in the fields. The quantity of cotton ginned to October 18 was 8,183,839 bales against 6,857,017 bales in the same time last season and 7,027,189 bales two years ago. In some parts of the cotton belt, notably the Southeast, the quality of the crop this season was lower than in 1941.

Trading in bleachable prime Summer yellow cottonseed oil futures on the New York Produce Exchange from October 26 to October 30, inclusive, comprised 23 contracts. Following is a price record for the week:—

	Cents per pound in tanks— High.	Low.	Close.
January	13.95	13.95	13.90@13.95
March	13.95	13.95	13.90@13.95
December	13.95	13.87	13.94@13.95

Crude, Southeast, 12¾c.

Chicago, Oct. 30.—Business is reported a little improved in cottonseed oil here and there. For the most part values are being well maintained about on the basis which has existed previously. Ruling prices are:—Refined, edible oil, 16½c. to 16¾c. per pound, drums, car lots; 17c. to 17¼c., drums, less than car lots.

Hull, Oct. 30.—Cottonseed oil, refined, 49s. per cwt.; crude, Egyptian, 39s. 7½d.

Cake and Meal.—The prevailing tone in the South was reported as firm. Inquiry generally good. Offerings light, mills in some sections being sold ahead.

Markets at Other Centers

Atlanta—Oct. 28

Cottonseed meal has advanced in price within the past week in response to an active demand. Quotations in the Southeast vary from $37 to $38 per ton for 8 percent ammonia material, an advance of $1.50 to $2 per ton. Large lots are reported unavailable to buyers and jobbers.

Prime crude oil continues in active demand at ceiling prices. Harvesting of cotton is reported well along and nearing its end in the Southeast. In spite of rains, it is reported that there is very little off-colored meal on the market.

Memphis—October 29

Some trading continues in crude cottonseed oil at ceiling prices; 12⅝c. per pound, Valley. Volume declining. Most mills sold ahead. Meal, 41 percent, $38 per ton, Memphis. Sales of Valley bulk cake at $33 per ton, November shipment, and $33.30 per ton, December shipment. Demand continues excellent. Hulls reached ceiling prices at most mill points; demand exceeds production. No recent trading in peanut oil; mills sold out against peanuts; last bought from government. Additional trading in peanut products will not take place until new allocation of peanuts made to mills. Soybean meal well sold ahead. Present price through resellers $39 per ton, bulk, Decatur basis, prompt shipment; future shipments available at considerably less. Cotton crop being rapidly gathered in this section. Closing cottonseed meal quotations on Memphis exchange as follows:—

	Oct. 22	Oct. 29
December	$36.25@36.50	$37.40@37.60
January	—@—	37.25@37.50
March	—@—	37.35@37.60

Fatty Acids

Capric Acid.—Quiet as a result of scarcity though inquiries not lacking. Quotations nominal.

Castor Oil.—Makers of toilet preparations in market for moderate quantities.

Coconut Oil.—Inquiries noted from makers of soaps, shampoos and other consumers.

Cottonseed Oil.—Contract movement fair but new business rather quiet. Market steady.

Lauric Acid.—Raw material scarce and market quiet. Prices nominal.

Linseed Oil.—Moderate lots in demand from makers of soaps, resins and other consumers.

Myristic Acid.—Makers of cosmetics experiencing difficulty in securing supplies.

Palm Oil.—Consumption apparently steady. New business quieter. Market firm.

Red Oil.—Steady movement to makers of textile compounds, soaps and other users. Raw material firm.

Soybean Oil.—Consumption reported on increase. New business fairly active.

Stearic Acid.—Contract movement steady. New orders in fair volume. Position of crude material tight. Acid market firm.

Chicago—Oct. 30

Fatty acids are steady to firm in a market that is marked by continuation of buying in a conservative vein. Inquiries indicate continuing interest on a fair basis. Ruling prices are:—Corn oil, double distilled, 14c. to 14½c. per pound, tankcar; 14½c. to 15c., drums, car lots; 15c. to 15½c., drums, less than car lots; coconut oil, distilled, 17½c. to 18c. per pound, tankcar; 18c. to 18½c., drums, car lots; 18½c. to 19c., drums, less than car lots; cottonseed oil, double distilled, 14c. to 14½c. per pound, tankcar; 14½c. to 15c., drums, car lots; 15c. to 15½c., drums, less than car lots; settled cottonseed soap stock, 60-62 percent basis, 3⅞c. to 4c.; boiled down soap stock, 65 percent basis, 4⅞c. to 5c.; cottonseed foots, 50 percent basis, 3⅞c. to 4c.

Fish Oils

Cod.—Recent importations apparently moving out fairly well. No burdensome holdings. Local market firm in company with primary situation.

Menhaden.—Supplies of refined oil available for prompt delivery light or moderate. Consumers in market for current needs. Tone firm. Reports concerning fishing operations continue unfavorable.

Sardine.—Interest on the part of

OZOKERITE
"DEETEE" BRAND
DISTRIBUTING and TRADING CO., Inc.
444 Madison Avenue New York Ctiy
Phone: ELdorado 5-0776

consumers of refined oil stimulated to some extent by firmness of crude, though actual purchases limited to unimportant quantities. Quotations unchanged but tone of market apparently stronger.

Sperm.—Fairly active inquiry from consumers entitled to the use of this oil under government rulings. Prices firm at recent levels. Under an order issued from Washington, October 27, deliveries of sperm oil to the armed forces were brought under allocation in order to insure adequate control over the nation's limited stocks. The original allocation order, issued some time back, made an exception of the armed forces.

Whale.—Refined oil in light supply on spot. Market firm though quiet.

Markets at Other Centers

Baltimore—Oct. 28

Trading in crude menhaden oil seems again to have come to a complete stop. Potential buyers are even disinclined to take oil at the ceiling of 66.6 cents per gallon, though it must be said that with fishing operations at a standstill for the present, no additions are being made to the supplies of crude oil, so that factories which still have some of the commodity on hand are disposed to hold on in the hope of getting at least the ceiling. Fishing operations are for the present in abeyance. These activities have gotten under way in a feeble manner off the North Carolina coast, with Florida idle and with the more Northern ports laid up for the season. The quotations on refined oil stand at 10.9 cents per pound with 7¾ pounds to the gallon, for light pressed oil and 11.9 cents per pound for bleached stocks.

San Francisco—Oct. 28

Restricted offerings kept the crude California sardine oil market quiet but firm last week, with indications from buyers that 65c. per gallon would be paid provided sellers would accept such business. But the catch of fish again was very light, only 9,172 tons being turned in during the week ended October 22 at all California processing points and since a goodly portion of the anticipated yield is already on contract, producers are feeling their way along.

Fish tonnage figures for the season up to October 22 amounted to 220,594 tons, against 296,124 tons as of a year ago at that time, according to the weekly report of the California Sardine Products Institute.

Fats and Greases

Grease. — Steady inquiry noted. Movement sufficient to prevent any additions of importance to supplies on spot. Quotations maintained. Tone firm.

Lard.—Firm here in company with situation in the West. Purchasing generally conservative, but inquiry reported more active. Live hog movement somewhat larger.

Stearin.—Fairly active inquiry reported for spot material. Prices maintained. Market tone firm.

Tallow. — Firm at ceiling prices. Steady contract movement. New business hampered by inadequate supplies, some consumers still reporting difficulty in purchasing from local sellers for prompt or nearby shipment.

Chicago, Oct. 30.—Business is a little better in scattered fashion in some of the grease and fats market sections. Buyers have been placing orders a little more readily than for some time past. Better tone is reported on tallows. Ruling prices are:—Choice white grease, 8⅞c. per pound; stearin, prime, 10.61c. per pound; inedible tallow, prime, 8⅝c. per pound. Following is a lard price record, per 100 pounds, for the week:—

	High	Low	Closing Oct. 30	Closing Oct. 23
Cash	$13.80	$13.80	$13.80	$13.80
Oct.	13.80	13.80	13.80	13.80
Dec.	13.80	13.80	13.80	13.80

Animal Oils

Degras.—In light or moderate supply on spot, common and neutral. Purchasing fairly active in a conservative way. Tone firm.

Lard.—Consumers not inclined to anticipate to any important extent but trade in moderate lots somewhat more active. Market firm with basic material.

Neatsfoot.—Consumption steady and liberal. No accumulation of supplies here. Offerings of some grades still lacking. Market firm.

Oleo.—Increase noted in request for moderate lots. Spot supplies apparently not burdensome. Quotations maintained.

Tallow.—Firm with basic material. Fair movement to local and other consumers.

Chicago, Oct. 30.—Some slight improvement is noted in animal oils. Inquiries have picked up and to some extent actual orders have been improving in spotty fashion. Offerings remain moderate. Ruling prices are:—Lard oil, No. 1, 14¼c. to 14½c. per pound; oleo oil, extra, 13c. to 13¼c.; tallow oil, acidless, 13¾c. to 14c.

Waxes

Reports throughout the wax market, and applicable for the most part to all waxes, were that scarcities abound and signs of relief from shortage do not appear at this time. Difficulties with shipping, transport, plus the curtailment policy of the government which views all shipping space solely from the standpoint of what materials are needed to win the war—these are the things that have brought dealers to the point of their warehouses being used for but skeletons of their former stock reserves. If wax were available, there would be a briskly boiling business done at this time.

— OPD : 72d Year —

Fats, Oils Civilian Quotas Reduced

—Continued from page 7

liveries for war contracts. Amendment No. 1 authorizes the procurement officer of the army, navy, or lend-lease to issue certificates so that suppliers can extend the military exemption. With this certificate, the lowest supplier on the ladder is assured equal treatment in establishment of quotas for his use of fats and oils.

Exemption to the restrictive measures of the order is also provided to cover use of fats and oils made for direct sale to the army, navy, or lend-lease. A further exemption is provided for the use of fats and oils used in making implements of war. This includes merchant and naval ships.

Wholesale dealers in linseed oil have been permitted, under the order, to sell to persons other than manufacturers no more than 80 percent of the amount sold during the base period. The amendment enables any person to sell linseed oil without restriction to the army, navy, or lend-lease, and reduces the amount he may deliver to others to 70 percent.

The purpose of this amendment is to improve the supply of fats and oils to the military. In order to compensate for this increase, the amount of fats and oils that may be used in certain non-military products is reduced: In edible products (not including margarin) from 90 percent of the base period to 85 percent; soap, except that made from foots, from 90 to 85 percent; and paints, varnishes, and lacquers, from 80 to 70 percent. Because supply of foots, a low grade residue from certain oil refinings, increases as production goes up, a greater supply of foots is now available. The amount of soap which may be manufactured from foots is, therefore, raised from 119 to 150 percent of the base period.

— OPD : 72d Year —

Chemurgic Conference Set for Nov. 17-18

—Continued from page 7

ston, manager agricultural extension division E. I. du Pont de Nemours & Co., Wilmington, Del.

Wednesday, November 18

"Essential Oils as Farm Crops," Dr. Ernest Guenther, chief research chemist Fritzsche Brothers, Inc., New York.

"Everybody's Farm," Edward Mason, WLW, Cincinnati, Ohio.

"American Grown Spices," M. L. Van Norden, Van Norden & Archibald, New York.

"Chemurgic Progress in Ohio," John F. Cunningham, dean College of Agriculture, the Ohio State University, Columbus, Ohio.

"Industrial Uses for Tobacco," J. S. McHargue, head department of chemistry, Kentucky Agricultural Experiment Station, Lexington, Ky.

"Domestic Sources for Tanning Materials," Dr. Fred O'Flaherty, director Tanners Council Laboratory, University of Cincinnati.

"Cellulose Progress," Dr. John Traquair, Mead Corporation, Chillicothe, Ohio.

"Products from Casein," Dr. F. C. Atwood, Atlantic Research Associates, Inc., Newtonville, Mass.

"A Farmer Looks at Chemurgy," J. D. Rathbun, manager George Ade Farms, Kentland, Ind.

"Industrial Uses of Castor Oil," J. E. Good, Woburn Degreasing Company, Harrison, N. J.

— OPD : 72d Year —

Soybean Oil Output Rests on Transportation

—Continued from page 7

cate that the beans being crushed are those within reasonable transportation distances from the crushing centers. It is when this portion of the crop has been crushed that the question will be pressing on what amount of carryover, if any, will be left for crushing next season.

And the answer to this question will be determined by how necessary it is that the entire crop be crushed as rapidly as possible, irrespective of transportation space for other products and materials. This, in turn, depends upon how quickly the oil and meal are consumed, and the space that is available for storage of oil and meal.

Of the 200,000,000-bushel soybean crop, approximately 170,000,000 bushels will be available for crushing, the remainder being retained for seeding purposes next season. It is estimated that the crushing facilities in the northern area of the corn belt can handle about 100,000,000 bushels, and the peanut and cottonseed crushers of the South, the copra crushers of the West, and the flaxseed crushers of the East can handle the remainder.

Aside from the problem of transportation there is also the problem of storage until the beans can be crushed. Officials of the Commodity Credit Corporation are urging growers to store the beans on farms whenever possible for the simple reason that "there are more beans than storage space." At the same time crushers are being urged to make every effort to facilitate early processing of frost-damaged beans as a precautionary move to save the beans from deterioration. Frost damage has been reported from Iowa, Illinois, and Minnesota. Its extent, however, is unknown to the officials.

Original CCC agreements with processors did not specify the discount to be applied to soybeans having more than 8 percent of damaged kernels. Processors were informed by CCC October 24 that a "discount of not more than ½ cent of each 1 percent of damaged kernels in excess of 8 percent shall be applied to all soybeans having more than 8 percent total damage but which grade not lower than No. 4 with respect to other factors, and which are not musty, sour, heating, or hot, and which do not have any commercially objectionable odor."

Processors were also informed that "soybeans purchased in accordance with this schedule of discounts are eligible for sale to the Commodity Credit Corporation."

— OPD : 72d Year —

Oil Trades Dinner Draws Large Attendance

The Oil Trades Association of New York held its annual banquet October 28 at the Waldorf-Astoria hotel. About 500 members and guests were present, including representatives of all branches of the oil industry from other cities. Entertainment consisted of an excellent vaudeville program. Dinner was preceded and followed by a social gathering.

— OPD : 72d Year —

M. N. Hakkak & Co. has moved to 261 Fifth avenue, this city. Telephone number is LExington 2-1017.

Egloff Honored By New York Chemists

—Continued from page 7

esthetic grades, various olefins of agricultural usefulness, and a variety of hydrocarbon materials for the production of synthetic plastics. He also told of the importance of natural gas as a source of explosives through the providing of hydrogen for ammonia compounds on one hand and paraffins for multiple nitration into powerful compounds.

Numerous telegrams from absent friends of Dr. Egloff were read to the gathering by Dr. E. N. Northey, chairman of the New York A. I. C. chapter. A specially happy note was presented by Dr. Robert J Moore, of the Bakelite Corporation, speaking on the multiple publications of the guest, in his argument that to do all that he had done Gustav Egloff must have been born quintuplets. Col. George A. Burrell, of the Atlantic States Gas Company, and Dr. Robert E. Wilson, of the Pan-American Petroleum Company, testified to the expertness of Dr. Egloff in the field of petroleum. Prof. Marston T. Bogert, of Columbia University, paid appreciative tribute to Dr. Egloff's contributions to the application of science to the industrial service of society.

— OPD : 72d Year —

Falk & Co. Offers Resins From Noncritical Bases

A new series of paint materials, produced from noncritical ingredients, is offered by Falk & Co., Pittsburgh, as forming polymerized and strengthened coatings. These new materials are named "Falkolacs." For their manufacture, the Falk company got WPB permission about two years ago to build a new plant, and this facility is now in operation.

Falkolacs are of the category of evaporative coatings; that is, they dry by evaporation. Their optimum solvents are mixtures of aromatic and aliphatic members of the hydrocarbon group. They are soluble in other solvents to an extent, but the hydrocarbon mixtures assure the quickest drying. The polymerized coatings are nonoxidizing.

Falkolacs are plasticizable with oils, fatty acids, ethyl abietate, and similar agents. They are said to have excellent wetting properties with respect to pigments and to give good waterproofing and durability. The producer says that they are particularly indicated for:—

(1) Ammunition lacquers, because of their drying speed and durability (especially Falkolacs 5, 51, and 71.)

(2) Camouflaging of osnaburg cloth and other surfaces, because, being nonoxidizing, they avoid spontaneous combustion. Falkolacs 71 and 81 are offered as textile finishes under CCC-D-746; 6 and 61 under T-1212 and T-1279 because of ready emulsifiability with alkalies.

(3) Traffic paints.

(4) Shellac replacement.

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Carnauba Wax
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AMCON AMORPHOUS WAXES

Melting Points 100° F. to 200° F.
Penetration 2 to 180

COLORS:
BLACK, AMBER, YELLOW, WHITE

AMCON TRADING CORPORATION
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Baker *helps you meet wartime emergencies with High Purity Chemicals—Tonnage Producing Capacity*

Throughout the nation production is soaring.

But it must move still faster. Wartime demands, in ever-increasing volume, are pouring in upon manufacturers.

Every day, chemists and production executives engaged in new fields of work are faced with new problems. Every day, their need for tonnage chemicals of exacting specifications is more urgent.

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We, too, have enlarged our facilities and you can get tonnage chemicals of unusual purity from Baker.

We invite you to call upon Baker — and to rely upon Baker as a reliable source of supply. Baker will gladly contribute the combined knowledge of its Technical, Executive and Manufacturing Staffs to meet any wartime problem.

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420 Lexington Ave.

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220 South 16th St.

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435 N. Michigan Ave.

Baker's
INDUSTRIAL CHEMICALS

Drugs and Fine Chemicals

Riboflavin and Thiamine Hydrochloride Reduced—OPA Ceilings on Blackstrap Molasses Fore-Noticed—Competition Grows in Totaquine—Citric Acid Deliveries Off Again

Price activity in the market for drugs and fine chemicals last week was restricted to a lowering of schedules on riboflavin and thiamine hydrochloride. The advance in prices for silver nucleinate and proteinate remained in the category of the possible and potential. Announcement of a definite schedule on totaquine offered by one producer brought a downward revision in the bulk quotation of another maker, but the minimum prices of these manufacturers were 10½c. per ounce apart. Citric acid makers reduced deliveries to 50 percent of those in November-December, 1941.

Orders issued by Federal agencies included an official price to govern on sales of "silver ordinary" by the Treasury Department, this metal being the byproduct of mining and minting. The Office of Price Administration also removes apple pomace from the restrictions of price control legislation, this in the interest of expediting sales and shipments of the pomace to pectin manufacturers. Prices for blackstrap molasses to be set by OPA were given fore-notice by that agency, being something new in OPA procedure. Holders of A-1-j ratings on ethyl alcohol no longer are excepted from the provisions of the War Production Board General Preference Order M-30, the exception being cancelled by the Director General of Operations. The exception no longer produced substantial deliveries.

Acetaldehyde.—Steady to firm in all categories of production and sale. Prices fully maintained. Supplies firm.

Acetanilide.—Demand well maintained. Outlook favors continued high movement along war program lines. Prices very firm.

Acetone.—Little change in fairly steady position. Some reports of surplus stocks controverted. Unlikely surplus will turn market toward depressed position.

Acetophenetidin. — Movement well up to recent volume. Undertones decidedly firm. Limited reserves in hands of distributors. Prices fully maintained, all directions.

Acid, Acetylsalicylic.—War program taking up large quantities for military forces. Medical reserves being built high. As yet, civilians needs have not suffered shortage. Firm undertones.

Acid, Arsenous.—Under complete allocation and definitely a firm to strong item. Demand good.

Acid, Ascorbic. — Deliveries, some producers, show signs of increase. Others find orders ahead of output. Very firm. Enormously active.

Acid, Benzoic.—Raw material for medicinal purposes not coming through in normal quantities. Position of acid grows tighter. Situation applies equally to benzoate of soda.

Acid, Boric.—Undisturbed. Subject to sustained consumption of steady sort. Prices display complete stability at present.

Acid, Cacodylic.—Not much competition. Fair output gets better than fair demand. Inquiries numerous and active. Prices stable.

Acid, Camphoric. — Supplies kept low by insufficient stocks raw material. Virtually on ration basis. Strong prices held in stable position.

Acid, Citric.—Output available for civilian consumption kept low by deliveries to Federal government. Likely to continue. Leading maker reduces deliveries to 50 percent of those in November and December, 1941, to provide acid for government purchases.

Acid, Fumaric. — Undertones firm. Demand steady, but not expansive. Production on conservative side.

Acid, Gallic.—Little U.S.P. acid on open market. Firm undertones. Prices stabilized. Ordinarily, scarcity would have raised values far above current position.

Acid, Gluconic.—Business changes little. Inflow of orders keeps volume about normal. Little competition current now.

Acid, Hydriodic.—Firm. Lacking important feature. Steady movement

Price Changes

Advanced

Alcohol, ethyl, tax paid, $3.80 per gal.

Reduced

Riboflavin, 10c. per grain.
Thiamin hydrochloride, 4c. per gram.

Comparative Values

Index numbers compiled from thirty-five typical drugs and fine chemicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
237.1	237.1	237.1	226.0

Market news that may have developed after this report was sent to press will be found on page 4.

Heigh Ho, Silver

It's this way. Under the Silver Purchase Act of 1934, silver miners dug 2,640,000,000 ounces of silver out of the ground, and sold it to the Treasury Department which proceeded to put it back into the ground—in the vaults at West Point.

Before it got back underground, the silver miners got 64½c. and, later, 71.11c. per ounce when silver glutted the world market and prices fluctuated between 35c. to 46c. per ounce. This silver is part of the gold-silver currency reserve mandatory under the Silver Purchase Act.

There it is today and there it will remain if the twelve United States senators from silver-producing States prevail over the nation's military needs.

The law says this silver cannot be sold for less than $1.29 per ounce. The fact that war machines require silver and the fact that a clear shortage of 50,000,000 ounces is in sight—notwithstanding probable imports of 115,000,000 ounces—means nothing to the twelve apostles of silver subsidy by government.

These twelve willful men say: —Let vibration, corrosion and leakage in airplanes abound. Let bearings of planes and tanks burn out. Let the recoil mechanism in artillery and anti-aircraft guns falter and fail on land, sea, and in the air. What matters it if the army and navy medical corps lack sufficient supplies of medicinal silver salts? What matters a scarcity of photographic film and paper for military observation? If there is not enough copper for electrical circuits, maybe string will do; anyway, you cannot have any Treasury silver for less than $1.29 per ounce.

This is not a potential crisis, It's actual. It's here—now. The Treasury Department begs for a change in the Silver Purchase Act to permit release of its silver stocks. The President says: —"Please gentlemen." But twelve silver senators say "No!".

Of course, the rest of Congress could over-ride the twelve—at the risk of losing their support in future legislation by congressional blocs.

Current prices on drugs and fine chemicals are given in the alphabetical list of prices beginning on page 9

CHEMICAL KESSCO PRODUCTS SPECIALTIES

Manufacturers of

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Pure and Self-emulsifying

DIGLYCOL STEARATE
Diglycol Oleate, Diglycol Laurate

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ACID EMULSIFIERS
Cosmetic and Industrial Grades
Other Esters to Meet Individual Requirements

For use as:

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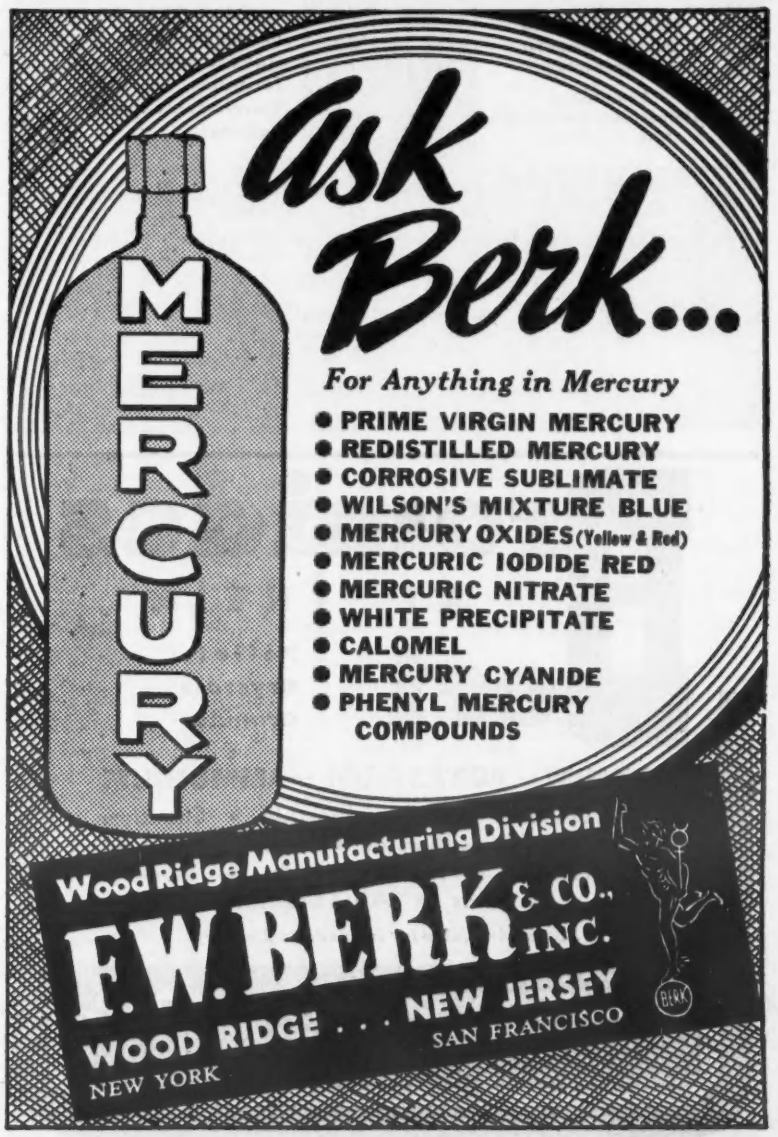

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Packed in drums and cans
Also other grades—Stocks in principal cities
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220 East 42nd Street, New York City
C/P

AMMONIUM CHLORIDE U. S. P.
POTASSIUM SULFATE N. F.
POTASSIUM CHLORIDE N. F.
POTASSIUM ACETATE U. S. P.
SODIUM CHLORIDE U. S. P. and C. P.
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ARLEX*
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Base Raw Material "Headaches"
Conditioner
Humectant—Plasticizer
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Arlex, a polyhydroxylic material, possesses special properties entitling it to consideration in the development of formulas to meet Government specifications.
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Save Metal Help Delivery
Return Drums to Atlas

Bromides AT THEIR Best
Pellets
Crystals
Granular
SODIUM — POTASSIUM — AMMONIUM
Liquid Bromine • Calcium Bromide • Strontium Bromide • Barium Bromide • Hydrobromic Acid
Ethyl Bromide • Methyl Bromide • N. Butyl Bromide • Allyl Bromide
Stocks Available for Immediate Delivery
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SAINT LOUIS, MICHIGAN
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keeps prices fully free from fluctuation or tendency to change.

Acid, Hydrobromic. — Consumption of bromine keeps output, this acid, conservative. Firm price position regardless of current light demand.

Acid, Mandelic. — Good inquiry. Fairly substantial sales. Reserves in fair shape. More business would get prompt deliveries at present.

Acid, Nicotinic.—Government taking more and more of this vitamin. Lend-lease plus armed forces needs likely to accelerate movement to government. Increased production needed to assure civilian supplies.

Acid, Nicotinic Amide.—Ditto report of Acid, Nicotinic acid, above.

Acid, Phosphoric.—Some say use in substitutes for scarce citric acid not suitable for numerous purposes. Successful in many.

Acid, Pyrogallic.—Not an ounce of surplus. Not a pound of recessed demand. Strong, active, firm.

Acid, Salicylic.—Deliveries, raw material, for making medicinal products for under normal. Increase doubtfully possible. Strong, and scarce.

Acid, Tannic.—Broad consuming requirements finds very narrow supply. Not a sign of successful production from new raw material. No mention of research in that direction.

Acid, Tartaric.—A suitable substitute would find a whole host of users. Output restricted to raw material available on much reduced scale.

Adeps Lanae. — Situation gradually righting self after impact of price ceilings. Some offer below ceilings still. Others stand poised on ceiling. Believed whole market will reach common basis in not far distant future.

Alcohol.—Regardless of higher taxes and permissible drawback of tax for certain consumers, center of market rests exactly on the war program in all its aspects. Rubber and explosives, plus ordinary chemical processes will take every gallon poured out from vastly more numerous stills. And the consumption on such account should grow. Will mean less and less available for non-essential uses. War Production Board rules holders of A-1-j ratings are no longer excepted from restrictions on use and delivery of ethyl alcohol, controlled by General Preference Order M-30. Prices on tax-paid ethyl alcohol rise to $11.92 per gallon, in tanks, effective November 1.

Alpha Tocopherol. — Consumption has an insatiable appetite. Would grow less until war ends. Federal government takes more and more with ever greater frequency.

Aloin.—Call broad and very steady. Stocks mainly light. Production cribbed, cabined and confined by difficulty in raw material replacements.

Ammonia Compounds.—All salts and compounds liable to clapping down of tight complete allocation in twinkling of an eye. Federal authority driving with loose rein at moment. Certain uses banned entirely.

Amyl Acetate.—Demand presses steadily and actively. Market stocks conservative. Little to no competition and surplus.

Amyl Butyrate.—No weakness. No unusual demand. Very steady, all quarters.

Amyl Chlorides.—Mixed chlorides steady under good government.

Amyl Ether.—Demand steady. Deliveries on fairly prompt basis. Full price maintenance.

Amyl Naphthalenes. — Both crude and refined confirmed in steady price position.

Amylene. — Producers have maintained unchanged prices for substantial period. Still well stabilized last week.

Barbital.—Army needs substantial. Being met promptly. Distributors on civilian account hold fair quantities, not a surplus.

Bay Rum.—On short side at strong prices that tend higher.

Berberine.—Needs being met. No important stock reserve. Call very steady.

Bismuth Metal and Salts.—Government eyes bismuth metal as substitute for metals growing increasingly scarce. Output of subgallate controlled by scarcity of gallic acid. Most salts in good supply.

Blue Mass.—No surplus but actual needs get fairly prompt delivery. Very firm, stabilized spot market.

Borax. — Demand sturdily maintained at volume noted for weeks past. Consumers acquire some protection against future needs. Price position shows no sign, early change.

Bromine and Bromides.—Every sign points to continued absorption of production to point of total elimination of surplus reserves.

Butyl Acetate.—Inquiry on new account good. Old customers take tenders steadily, promptly. Prices show strength.

Butyl Alcohol.—Demand good. Prices steady. Market for practically every pound of output.

Butyl Carbinol.—Steady calls for prompt deliveries. Steady to firm prices.

Caffeine.—Seasonal rise in call for hydrobromide and citrated items. Both available on limited basis only. Alkaloid consumption takes production promptly. Reported much larger output could be absorbed. Regular customers get first call.

Calcium Gluconate.—Active along lines exceeding normal calls. Creates market of very firm undertone and prices.

Calcium Glycerphosphate. — Stocks conservative. Controlled by irregular flow, raw materials. Undertones show substantial strength.

Calcium Mandelate. — Requirements being met on fairly prompt basis. Undertones steady to firm. Little competition, any quarter.

Calcium Panthothenate.—Consumption active, broad, and sustained. Fully abreast of recent call. Firm undertones. No competition.

Calcium Sulphocarbolate. — Fairly quiet at moment. Firm undertones, notwithstanding. Stocks conservative. Likely so to remain.

Castor Oil.—Bean supply a mounting problem. Plenty in Brazil now owned by Federal Government. Brazilians want ownings moved. Storage space high problem here, plus steamer space. Production at plants curbed by situation.

Chicago, Oct. 28.—Castor Oil prices are:—Cold pressed, U.S.P., returnable drums, car lots, 14½c. per pound; drums, less than car lots, 15¼c.; tanks, 12¾c.; No. 3, extracted, returnable drums, car lots 14½c.; drums, less than car lots, 15c.; tanks, 13½c.

Chloral Hydrate.—Production subject to alcohol situation which does not improve save to meet rubber program of military forces.

Chloroform.—Demand good. Output subject to troublesome situation, raw material. Stabilized on firm basis.

Codeine.—More inquiry for phosphate hails arrival of pre-Winter requirements. Consumption usually rises. Subject to reserve in all sales other than to military arms.

Collodion. — Stocks conservative. Output subject to raw material worries and miseries. Pressing needs being met fairly well.

Corn Syrup.—Retail store distribution leaves room for plenty of improvement. Wholesale consumers get bulk of production. Output high.

Corrosive Sublimate.—Sales on Federal account take up much of production. Normal buyers hold subnormal quantities. Strong.

Coumarin.—Broad consuming channel gets fairly good deliveries but factory output could expand and still find buyers.

Creosote. — Reserves subnormal. Stocks short. Demand tends to grow seasonally. Market shows substantial strength and no competition.

Ephedrine.—Naturally broader demand as Winter comes closer. Synthetic output turning out excellent supplies. Movement already gaining. Prices steady.

Epsom Salt.—Escapes rigors afflicting many other fine chemicals. Strong and normally active at full prices. Deliveries on good basis.

Ether.—Subject to all troubles and annoyances residing on items dependent on abundant supplies of alcohol. All strong and active.

Fish Oils.—Some signs of improved trading interest. Rise in volume not yet substantial. Stocks in hands of sellers reported large. Large enough to keep shark fishing at minimum despite fact this is shark season on Pacific Coast.

San Francisco, Oct. 28.—Purchasing of fish liver oils continues light. Price structure a long ways from any sort of stabilization, 75 percent of the ceiling values being considered a most excellent level, if sellers could get it. Considerable concern felt over the neglect of shark fishing, the season now being on.

Fusel Oil.—Accumulation of crude material not unlikely under expanded alcohol program. No change from recently submitted price schedule.

Glycerin. — Situation remains in satu quo. Heavily expanded national needs being met by present production. Leaves little surplus supply. Output subject to maintenance excellent supply of raw materials. No developments yet in OPA study for possible rollback of prices.

Chicago, Oct. 21.—Glycerin prices for both chemically pure and high gravity are:—Tanks, 18c. per pound; drums, car lots, 18½c.; drums, less than car lots, 18¾c.

Guaiacol.—Call for all kinds shows broadening. Normal for current season. Buyers find market understocked. Producers and suppliers very firm.

Iron Acetate, N. F.—Develops wider interest for buyers. Needs gain moderately. Stocks conservative. Strongly held in strong hands.

Iron Citrate.—Output subject to troubles entailed in citric acid scarcity. Reserves low. Pressing needs being supplied well.

Iron Glycerophosphate. — Rather routine spot market. Sellers report firm position, prices. Current volume of demand met well.

Iron Phosphate.—Excellent demand. Deliveries not excessive. Reserves conservative. Prices show firm to firmer position. No important competition.

Iron Pyrophosphate. — Sellers reserved by reason of moderate stocks. Demand steady along routine lines of consumption.

Iron, Reduced.—Leading producer keeps stable market. Reports good demand being met with fair deliveries of prompt sort.

Isopentane. — Leading producer maintaining stabilized price position. Prevailed for substantial time.

Isopropyl Acetate. — Firm undertones. Fairly good-sized market. No surplus of stocks on spot.

Lecithin.—No further price change. Values well maintained. Situation considered quite steady at moment.

Lithium Salts.—Values fully supported on firm basis. Demand about normal. Not excessive. Fair stocks, most directions. No large surplus.

Magnesia.—Day-to-day inflow of orders steady. Meets firm, well-maintained spot market. Needs being well met by producers. Firm prices.

Magnesium Hydroxide. — Medicinal article more active. Wider call for somewhat larger quantities. Very firm prices and market undertone.

Menthol. — Stocks, natural item, shrink slowly, but steadily. Eventual dependence on domestic production almost certain. Output synthetic item not subject to much increase, if any.

Methanol.—Situation little changed. Active consumption keeps reserves on low side. Signs point to larger needs developing in future. Production already at excellent levels. No official figures. Considered war secret, apparently.

Methyl Acetone.—Substitution for benzol in paint and varnish removers urged. Receiving experimental research at present.

Methyl Salicylate.—Subject to availability of raw material—phenol. Latter production directed mainly to wide war program. No real need of regular customers goes unsatisfied.

Milk Powder.—No further change. Lend-lease requirements forecast Agricultural Marketing Administration as heavy purchaser over balance of year. Real need to expand production.

Methylamyl Ketone.—Solvent users active buyers. In market steadily for substantial quantities. Keeps firm, active market undertones.

Molasses.—Office of Price Administration to set specific dollars and cents ceiling prices on blackstrap from cane and beets. Country divided into five areas. New alternative ceilings to range 18c. to 18½c. per gallon, Areas 1 and 2, and $20 to $33.20 per ton in areas 3, 4, and 5. Details elsewhere.

Morphine. — Movement excellent. More and more production goes to Federal government service branches. Program requires consideration future supplies, raw material.

Opium.—Domestic production encouraged. Program under close, tight control of Federal authority in making. Strategic reserves built higher.

Pectin.—OPA removes price control on apple pomace for pectin makers. Intended to encourage flow of pomace to the manufacturers.

Phenobarbital. — Active and firm. Military needs bulk large in sales. Civilian requirements met thus far.

Phenothiazin. — Unmodified item in stable price position. Output meets demand very well. Surplus of stocks unlikely.

Podophyllin. — Producers maintain comparative high values. Raw material recessions unproductive of price change on derived product, as yet.

Potash Arsenite.—U.S.P. firm, active, in conservative supply. Demand about normal. Production equals recent totals.

Potash Guaiacolsulphonate.—Stocks limited. Position almost identical with all materials involving guaiacol as raw material. Seasonal demand good.

Potash Hydroxide. — U.S.P. sticks steady to firm. Demand routine, but maintained at close to normal volume. Undertones show strength.

Potash Permanganate. — Government purchases keep open market stocks distinctly conservative. Producers apportion unsold material carefully.

Potash Sulphocyanide. — Lack of ample stocks of raw material keeps output of both C. P. and N. F. conservative. Undertones very firm.

Procaine.—Sales against needs of armed forces substantial. No surplus on open market. Prices firm and developing added strength.

Quicksilver. — Output of mines moves almost in bulk to government buying agencies. Future of supply involves pending arrival of bad weather on Pacific Coast. Every effort made this year to keep mines in production.

San Francisco, Oct. 28.—Quicksilver strong but quiet last week. Offerings fairly light. Larger producers reported futures fairly well sold out for period of next few months. Spot supplies not plentiful. Quoted at $191 to $192 per flask, f.o.b. San Francisco.

Quinine.—Stocks in hands of producers and distributors being sold to government. Stock pile up. Distribution by producers to manufacturers and wholesalers out for duration. Every ounce for civilian use requires allocation authority. Believed that armed forces will get most of available supply. Use of other anti-malarials to grow. See box headed Sunflowers, page 71.

Resorcinol.—The U.S.P. item finds fair movement, according to local distributors for the producer. Firm undertones. Very steady prices.

Riboflavin.—Prices reduced to basis 65c. to 68c. per grain. Reduction made regardless of total lack of surplus stocks in hands of makers. Wide, virile demand continues.

Rice Bran.—This concentrate moving smoothly and steadily in high volume. Outlook suggests no early creation of surplus production.

Rochelle Salt.—Very firm. Demand routine in character but in good volume. Stocks on conservative side. No surplus.

Saccharin.—Stocks kept at moderate size for reserve purposes. Output moving rather swiftly into consumption. Undertone of market very

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Produced at Our Gustine, Cal., Plant
Highest Quality
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steady. Prices show no sign of pending change.

Salol.—Supply not too ample. Production ties into the phenol situation and the position of all salicylates. Demand good. Prices firm.

Santonin.—Little activity at moment. Main concern now is production of reserve to meet a Spring demand probably largest in many years.

Seidlitz Mixture.—Movement about equal to recent volume. Firm market position not likely to change until raw material situation improves substantially.

Silver Salts.—No change yet in prices on nucleinate or proteinate. Likely to go up eventually because of much higher prices being paid for bullion. Office of Price Administration sets 45c. per ounce as maximum for "silver ordinary." Is metal accumulated by Treasury Department from byproduct of gold ore deposited with Treasury for refining; scraps of metal left from coinage; and metal received from under-estimating silver content of mutilated coins. The schedule of silver nitrate prices since the last report on nitrate in 250-ounce quantities—500 ounces would cost ¼c. less—together with comparative price on silver bullion in New York and London, was as follows:—

	Per ounce		
		Bullion	
	Nitrate.	New York.	London.
	Cents.	Cents.	Pence.
Saturday	32⅝	43⅜	23½
Monday	32⅝	44⅛	23½
Tuesday	32⅝	44⅛	23½
Wednesday	32⅝	44⅛	23½
Thursday	32⅝	44⅛	23½
Friday	32⅝	44⅛	23½

Soda Benzoate.—Output controlled by availability of raw material. War program taking huge quantities of same. Need for this benzoate met thus far. Stabilized prices.

Soda Bicarbonate.—Normal call for U.S.P. goods. No large stocks held in reserve. Undertone of market firm. So are prices.

Soda Cacodylate.—Production meeting very fair volume of orders current now. Prices very steady in absence of much competition.

Soda Hydroxide.—U.S.P. stocks get good call. Orders up to average size. Deliveries on fairly good basis. Quotations show sustained strength.

Soda Perborate.—Reported to be slightly easy. Some considering possibility of army and navy, or lend-lease operations taking far more than to date.

Sultanilamide. — Larger production would find many buyers to take same. Army and navy get first call. And it's very large.

Sulfathiazole.—Not overly plentiful. Production well engaged ahead. Prices apparently steady.

Strychnine Salts. — Raw material supplies begin to pitch. Not many replacement parcels have arrived over substantial period of time. Some curtailment of nux vomica shipments from India reported. Basically strong.

Sugar of Milk.—Stocks kept low by war needs. Use of impalpable powder in military flares playing a part in the shortage.

Sulphonethylmethane.—Routine position maintained. Stocks kept conservative by limitations on supplies of raw material. Undertones very firm.

Sulphonmethane.—Position identical with sulphonethylmethane, above.

Tartar Emetic.—Limitations on raw material supplies confined production to conservative quantities. Undertones indicate market of substantial strength, all quarters.

Theobromine.—Very scarce without a reasonable change of any improvement short of victory in the war.

Thiamine Hydrochloride. — Prices lower as demand goes higher and production is pushed hard. Quotations, 100-gram lots, 37c. per gram; smaller quantities, 40c.

Thymol.—A buyer stands ready to take each pound as it comes from the plants. Production from coaltar base much ahead of previously normal output. Strong, stable position.

Totaquine.—Likely to play increasingly important role in meeting civilian demand for a satisfactory antimalarial. Definite schedule, one producer, in effect. U.S.P. XII, 100-ounce lots, 40c. per ounce; 25-ounce lots, 43c.; 5-ounce lots, 45c.; smaller quantities, 45c. to 80c. Another producer quotes 50½c. per ounce in bulk to the wholesale drug trade.

Gets Trade Ass'n Award

Ray C. Schlotterer, secretary of the Federal Wholesale Druggists' Association, will be presented with an honorary certificate showing successful completion of the three-year prescribed course of study in trade association management, conducted at Northwestern University, Evanston, Ill., under the auspices of the National Institute for Commercial and Trade Organization Executives. The presentation will take place at the annual convention of American Trade Association Executives, in the Pennsylvania hotel, this city, November 5 and 6

Mo. Drug & Chemical Ass'n Hears S. De Witt Clough

The Associated Drug and Chemical Industries of Missouri held a meeting October 14 in the University Club, St. Louis, October 14. Dr. J. S. Brewer, of Sayman Products Company, president of the association, presided. The "Drum of Dimes" was won by Morton S. Meyer, of the Thompson-Hayward Chemical Company. Dr. Brewer made a brief report on the convention of the Federal Wholesale Druggist Association, and pointed out that two association members O. J. Cloughly, of the Federal Wholesale Druggists Association, and Mr. Meyer of the National Wholesale Druggists Association were appointed to the board of control.

C. W. Godefroy of the Godefroy Manufacturing Company, advised that there will be a special meeting of the Missouri legislature, and suggested that the members write or wire Gov. Donnell urging the abandonment of present sales tax tokens because of the quantity of zinc they consume in their manufacture.

The guest speaker was S. DeWitt Clough, president of Abbott Laboratories, Chicago. He talked on the importance of chemicals in modern warfare.

We Are In A Favorable Position To Supply Your Bulk Needs In
Tincture Iodine, U. S. P.
Tincture Green Soap
Tincture Iodine, Mild, U. S. P.
Soap Liniment
and other . . .
Standardized Liquid Pharmaceuticals and Specialties
We offer a complete line of Elixirs, Fluidextracts, Liniments, Mixtures, Solutions, Spirits, Tinctures, and Ointments.
Quotations on private formulæ cheerfully given.
Price list on request
Standard Drug Company
Incorporated
246 South St. Newark, N. J.

Salary Limitation Regulations Issued

—*Continued from page* 3

form or medium whatsoever (excluding insurance and pension benefits in a reasonable amount).

While the regulations contain no exemptions of any nature, there is a provision that the Stabilization Board and the Commissioner of Internal Revenue may make exceptions for salaries "which are deemed necessary for effective administration of the act and these regulations," but no explanation was given as to how those exceptions might be applied.

The $25,000 limit applies only to salaries because that is the extent of the board's power under the act. Control of income from other sources, it was pointed out, could be effected only by taxation, which requires an act of Congress. This includes such income as dividend payments, royalties, rentals, etc. Doubtlessly the President will ask Congress to take steps to curb such incomes in the next tax bill.

In definite terms, the regulations prohibit the payment to any employee of an amount of salary which, after deduction of the Federal income taxes on the whole salary, would exceed $25,000. The effect of this is to throw the burden of state income taxes directly upon the $25,000 which can be retained.

It is provided, however, that additional payments of salary may be made to take care of customary charitable contributions, but only where the recipient of the salary has no other sources of income which can be utilized for this purpose without undue hardship. Additional payments of salary also may be made to take care of payments on life insurance policies and fixed obligations which were in force on October 3, 1942, and past income taxes due, but in these cases only where the recipient of the salary has no other source of income which can be utilized for such purposes and only where he can show that he is unable to meet the payments without disposing of assets at a substantial loss, involving undue hardship.

No allowance will be made for life insurance policies or fixed obligations entered into after October 3, 1942.

Violation of the regulations by a company will subject it to tax on the full amount of salary paid, and not simply the amount in excess of the $25,000, and both payer and recipient of violating salaries may be punished under the penal provisions of the Second Price Control Act.

— OPD : 72d Year —

Blackstrap Molasses To Be Ceiled by OPA

—*Continued from page* 5

and which OPA is using as base points are named as follows:—

No. 1—La., Fla., Tex., and Ga. No. 2—N. Y., Pa., Md., Mass., and N. J. No. 3—Ore., Wash., and Calif. No. 4—Idaho, Utah, Mont., Colo., Wyo., Kans., S. D., and Neb., excluding Grand Island. No. 5—Ind., Mich., Ohio, Wis., Minn., Iowa, and Grand Island, Neb.

The new alternative ceilings will be as follows, f.o.b. mill or factory in tank cars, preserving normal trade differentials:—

Area No. 1—18 cents per gallon, 42 degrees Baume. No. 2—18½ cents. No. 3—$20.00 per ton of 2,000 pounds. No. 4—$24.20 per ton. No. 5—$33.20 per ton.

Transportation charges at the lowest rate available from the mill producing the blackstrap molasses being sold to the buyer's place of business may be added to arrive at the delivered ceiling, if sales are made on that specific delivered basis.

— OPD : 72d Year —

Blackplate Limit On Uses Removed

—*Continued from page* 5

hardened lard, rendered pork fat and edible tallow including animal, vegetable and marine blends. These must be packed in 45 pound cans. For the two months ending December 31, blackplate consumed for this purpose is restricted to 10 percent of the 1940 pack in containers 45 pounds and larger.

3. Permissable sizes for packing printing, duplicating and lithographing inks are made more specific.

— OPD : 72d Year —

Jack Henry, of Joseph Turner & Co., chemicals, Ridgefield, N. J., became a father for the second time October 15. This one is a boy.

ALL GRADES OF
REFINED GLYCERINE
U. S. P. B. P.
YELLOW DISTILLED
HIGH GRAVITY
DYNAMITE
★ ★ ★ ★
REFINERIES LOCATED AT
• Brooklyn, N. Y.
• Jeffersonville, Ind.
• Jersey City, N. J.
• Berkeley, Calif.
• Kansas City, Kans.
COLGATE-PALMOLIVE-PEET CO.
GLYCERINE DEPARTMENT
105 HUDSON STREET
JERSEY CITY, NEW JERSEY

R. GESELL
INCORPORATED
Manufacturing Chemists
★
Specializing in Private Formula Work
★
200 WEST HOUSTON STREET
NEW YORK, N. Y.

Carey PRODUCTS
Carbonate of Magnesia
Oxide of Magnesia
U. S. P. and Technical Grades
THE PHILIP CAREY MFG. COMPANY
Dependable Products Since 1873
LOCKLAND, CINCINNATI, OHIO

Basic materials
for Drugs and Cosmetics
■ One of the many essential services to the drug and cosmetic industries rendered by the House of McKesson for more than a century is the importing and distributing of basic drug materials from all parts of the world. Improved, perfected and extended, this important service to the industry is now used by scores of manufacturers to help produce drug and cosmetic preparations which satisfy the exacting needs of millions of consumers. Inquiries welcomed.
Agents and Distributors for:
Solvay Sales Corporation—*Alkali-Chlorine, Paradichlorobenzene*
E. I. Du Pont de Nemours, Inc.—*Camphor, USP, XI*
Carus Chemical Co.—*Benzoic Acid, Soda Benzoate*
Brown Company—*Chloroform*
Hawaiian Pineapple Co.—*Citric Acid*
Zinsser & Co.—*Gallic Acid, Tannic Acid*
Stauffer Chemical Co.—*Cream Tartar, Tartaric Acid*
British Cod Liver Oil Producers—*Cod Liver Oil*
INDUSTRIAL CHEMICAL DIVISION
McKESSON & ROBBINS, Inc.
155 E. 44th Street, New York, N. Y.

VITAMINS A and D
Bland, stable concentrates suitable for all Pharmaceutical and Food Purposes; also Alcohol Solutions (Water Dispersible)
Sole Selling Agents for
COLLETT CORPORATION
R. W. Greeff & Co. Inc. RWG New York, U.S.A.
R·W·GREEFF & CO.
10 ROCKEFELLER PLAZA,
NEW YORK CITY

PLYMOUTH
PLYMOUTH STEARATES
ALUMINUM — ZINC — CALCIUM — MAGNESIUM
Established Qualities Manufactured for thirty years by
M. W. PARSONS, Imports & PLYMOUTH ORGANIC LABORATORIES, Inc.
59 Beekman Street, New York City
DISTRIBUTORS: THOMPSON-HAYWARD CHEMICAL CO., KANSAS CITY, MO., AND BRANCHES

RESORCIN
CATECHOL - META-NITRO-PARA-TOLUIDINE
PENNSYLVANIA COAL PRODUCTS COMPANY
PETROLIA, PENNSYLVANIA

BPC
BENZOL PRODUCTS COMPANY
237 SOUTH STREET, NEWARK, N. J.
MANUFACTURERS OF FINE CHEMICALS
Ethyl Cyanoacetate

NICOTINIC ACID DIETHYLAMIDE
Diacetyl Tannin USP XI (Tannyl Acetate)
Hexamethylene-tetramine-methyl-iodide
Colloidal Silver
Sodium Methylarsonate
HERMAN MEYER DRUG COMPANY, INC.
66-38 Clinton Ave. NEwtown 9-2110 Cable Sulfanyl Maspeth, N.Y.

FOR QUALITY AND SERVICE
LANOLIN
Anhydrous, U.S.P.
KOLLAG
Colloidal Graphite
P&B
SINCE 1900
Pfaltz & Bauer, Inc.
EMPIRE STATE BUILDING, NEW YORK

Stauffer
CREAM OF TARTAR
TARTARIC ACID
BORIC ACID • CARBON TETRACHLORIDE • BORAX
TITANIUM TETRACHLORIDE • SULPHUR CHLORIDE
SILICON TETRACHLORIDE • SULPHURIC ACID
CAUSTIC SODA • WHITING • TARTAR EMETIC • LIQUID
CHLORINE • SULPHUR • SODIUM HYDROSULPHIDE
CARBON BISULPHIDE • TEXTILE STRIPPER
STAUFFER CHEMICAL CO.
420 LEXINGTON AVE., NEW YORK
SAN FRANCISCO, CAL. CHICAGO, ILL.

WPB Inventory Group Favors Control Plan

—*Continued from page* 3

sult of both an unusually active demand and the limitation of production in many lines.

2. The inventory situation in the chain store field is spotty; men's wear and variety store chain systems have accumulated exceptionally heavy stocks while the inventories of grocery, drug, and shoe chain systems are below "normal" in relation to their sales.

3. The inventories of department stores, especially the large stores, are excessive in relation to their sales.

4. The inventories of large independent retail stores have increased at a much more rapid rate than their sales. e reverse has been true of the small independents.

Outlining what it believed should be considered in preparation of a regulation program, the committee said any control program should adhere to the following general criteria:

1. It should be simple.
2. It should conform to usual accounting practice.
3. It should conform to the usual methods of conducting business.
4. It should be inexpensive to administer from the standpoint both of the government and of the firms regulated.
5. It should promote the orderly liquidation of excess stocks and should not stimulate holders of such stocks to dump these precious reserves of goods precipitously on the retail market.
6. It should allow for seasonal fluctuations in sales and purchases.
7. It should not interfere with production.
8. It should be flexible enough to permit the firms regulated to adjust their operations to meet changing conditions.
9. It should conform with the natural tendency of inventories to fluctuate less rapidly than sales.
10. It should, if possible, be applied by lines of merchandise or by departments.

— OPD : 72d Year —

A.D.M.A. Appoints Flanagan Counsel

—*Continued from page* 3

as Lieutenant-Colonel in the U. S. Army, and who has been granted a leave of absence for the duration.

Mr. Flanagan is a graduate of Columbia University and the Cornell Law School, and is a member of the New York State and the Federal Bar. After receiving his B.S. degree from Columbia University, he worked for several years as a reporter on leading New York newspapers before returning to college for his legal education. He served in the U. S. Army for a year and a half in the last war and, thereafter, continued as a field artillery reserve officer for over ten years.

Immediately prior to joining S. B. Penick & Co. in January, 1938, he had been an assistant for several years in the Attorney-General's office of New York State at 80 Center street, this city.

Although born in Rochester, N. Y., Mr. Flanagan spent most of his early life in Cortland, N. Y., where he graduated from the Cortland High School. He is married and has one son and resides in Queens Village, L. I.

Mr. Flanagan's new connection will not change his association with S. B. Penick & Co.

— OPD : 72d Year —

Basic Magnesium Stock Acquired by Anaconda

—*Continued from page* 5

vice-president of Anaconda, in charge of metallurgical operations has been named vice-president.

The stock in Basic Magnesium, Inc., in addition to that bought by Anaconda Copper Mining, is owned by British interests represented in United States by Major C. J. P. Ball, who furnished technical information and designed the plant.

Basic Magnesium has been operating and would complete construction of the magnesium plant at Las Vegas, owned by DPC, Secretary Jones said. The plant, he explained, would have a capacity of 112,000,000 pounds of metallic magnesium annually and would cost more than $100,000,000 when completed. The first unit of the plant went into production August 31 and it was estimated the entire plant would be completed by April 15, 1943.

Chicago Rubber Group To Meet November 27

The Chicago Rubber Group held its initial meeting of the 1942-43 season at the Bismark hotel on October 16. The speaker was Dr. I. Drogin, director of research of the United Carbon Company, on "A Study of Carbon Black in Natural and Synthetic Rubbers." The meeting was attended by 140 members and their guests.

The next meeting of the Chicago group will be held in conjunction with the National Chemical Exposition, November 27 in the Sherman hotel. At this meeting, J. W. Crosby, of the Thiokol Corporation, will speak on "Outstanding Properties of Various Types of Thiokol." There will be motion pictures, including two new films by the Standard Oil Company of New Jersey, entitled "Rubber Goes Synthetic" and "Bouncing Molecules."

The Christmas party will be held in the Terrace Casino of the Morrison hotel December 18.

— OPD : 72d Year —

McK&R Sales Up

Consolidated net profit of McKesson & Robbins, Inc., for the three months ended September 30, 1942, the first quarter of the company's present fiscal year, was $693,565 after interest and after provision of $1,974,257 for estimated Federal taxes, according to unaudited figures released by W. J. Murray, jr., president. For the three months ended September 30, 1941, the company reported consolidated net profit of $1,352,825, after interest and after provision of $992,000 for Federal taxes. Net sales were $56,019,855 as compared with $50,244,278 for the same period last year, an increase of 11.49 percent over last year.

— OPD : 72d Year —

Merck Co. Among Leaders In Direct Mail Ad Field

For the fifth successive year, the board of judges of the Direct Mail Advertising Association has selected Merck & Co., manufacturing chemists, Rahway, N. J., as one of the fifty direct mail leaders in the United States and Canada. This year, the company also won the Typography Plaque awarded by the American Type Founders Corporation for "The Best Example of Modern Typography in a Direct Mail Campaign." Douglas Wakefield Coutlee, director of Advertising, received the two awards at the association's annual meeting held at the Roosevelt hotel, this city, October 16.

— OPD : 72d Year —

Ethyl Alcohol Price Set for Chartres Co.

OPD Washington Bureau

The Office of Price Administration has permitted the Chartres Alcohol Company, New Orleans, La., to sell ethyl alcohol of 188 proof or higher, of any formula thereof, including pure ethyl alcohol, produced from molasses, to the Defense Supplies Corporation, Washington, at 53 cents per wine gallon, f.o.b. plant.

— OPD : 72d Year —

Armed Forces Gift Kits Exempt on Tube Turn In

OPD Washington Bureau

Gift kits containing shaving cream or toothpaste tubes can be purchased for members of the armed forces without turning in an old tube, the Director General for Operations has ruled. The action, taken in an amendment to M-115, also specifies that the shaving cream or toothpaste comprise not over 25 percent of the total value of the gift box.

— OPD : 72d Year —

Ky. Filled Milk Act Decision Appeal Denied

The Kentucky Court of Appeals has refused the petition of the Carolene Products Company to reconsider a former decision upholding the filled milk act of the 1940 legislature, prohibiting addition of fats, oils, etc., to milk to make what might be termed synthetic milk. The Carolene Products Company held that the Kentucky statute violated both the State and Federal constitution.

— OPD : 72d Year —

Davison Chemical Corporation, Baltimore, has elected to its directorate R. A. Lockwood, John E. Semmes and R. L. Snodgrass.

Brocklesby Joins Borden

Dr. H. N. Brocklesby, an authority on marine oils and vitamins, has been appointed to the scientific staff of the special products division of the Borden Company, this city. He was formerly chief chemist for the Fisheries Research Board of Canada.

— OPD : 72d Year —

WSA Revises Insurance Rates on Toiletries

The War Shipping Administration has announced new forms and procedure with respect to the treatment of collateral deposits and declaration of shipments under "warshipopencargo" policies. It also announced that, effective fifteen days from October 22, all warshipopencargo policies covering shipments of soap and toilet preparations and metal articles, will be automatically cancelled. Action in this respect was taken after consultation with the Office of Price Administration. It was decided to exclude these luxury items from war risk coverage at non-compensatory rates and to continue to provide war risk insurance on shipments of these commodities only on a facultative basis at compensatory rates.

— OPD : 72d Year —

Toilet Water Price Approved

OPD Washington Bureau

The Office of Price Administration has announced that the Benly Products Company, Philadelphia, may sell and deliver to Helena Rubenstein, Inc., this city, a toilet water preparation, subject to a contract entered into on September 14, at a price no higher than $5.315 per gallon, f.o.b. Philadelphia.

— OPD : 72d Year —

Obituaries

Lee Blaffer

Lee Blaffer, former executive of the Humble Oil Refining Company, died in Toronto recently from a heart attack on a downtown street. He was sixty-six years old.

Born in New Orleans, Mr. Blaffer began his business career in 1894 with the Monongahela Consolidated Coal & Coke Company in New Orleans and then, in 1902, went into the oil business at Spindletop, Tex. He was a member of the firm of Blaffer & Farish from 1903 to 1917, becoming vice-president and treasurer of the Humble Oil & Refining Company in the latter years. He was president and treasurer from 1933 to 1937 when he was made chairman of the board, a post he held until 1941. For a period he served as a coordinator for the Division of Contract Distribution, Office of Production Management.

Harry G. Booth

Harry G. Booth, secretary of the Diamond Alkali Company and president of the Anchor Box & Lumber Company, died October 22 in Pittsburgh from a heart disease. He was seventy-two years old.

Born in Pittsburgh, Mr. Booth had been associated with the Diamond Alkali Company since its organization in 1912. Surviving are his wife, a daughter and three sons.

Courtney P. Terry, for thirty-six years representative for the J. F. Kurfees Paint Company, Louisville, in the Carolinas, died October 13, at Columbia, S. C., of a cerebral hemorrhage. He was sixty-five years of age.

Thomas M. Walsh, a salesman for the General Ceramics Works, Metuchen, N. J., died in West Nyack, N. Y., October 25. He was sixty-two years of age.

— OPD : 72d Year —

Trade Briefs

Niagara Alkali Company, 60 East Forty-second street, this city, is distributing the October issue of "The Pioneer," containing newsy items relative to new uses and products.

A total of 80,390 trucks, trailers and miscellaneous vehicles have thus far been under the truck rationing program, the Automotive Branch of the WPB has announced.

Owens-Corning Fiberglas Corporation plants at Ashton, R. I., and Newark, Ohio, have been among the joint Army-Navy Production awards for outstanding work on war contracts.

Motor truck operators of more than two commercial motor vehicles must obtain fleet War Certificates of Necessity for all vehicles. Operators of one or two vehicles require a single unit certificate for each vehicle, under the provisions of ODT No. 17.

International Nickel Company plant at Huntington, West Va., has won the right to fly the Army-Navy "E" with two stars. Each star represents the renewal of production honors for a six months' period. The original award was for a twelve-month period.

— OPD : 72d Year —

Bone Black Removed From Shipping Space System

OPD Washington Bureau

Bone black and black char have been removed from the Shipping Space System, it was announced October by Dr. W. Y. Elliott, Director of the Division of Stockpiling and Transportation of the War Production Board.

RARER PERMANGANATES

Available in limited quantities at present for experimental purposes are the following Permanganates:

Sodium Calcium
Silver Magnesium
Lithium Strontium
Zinc Caesium
and others

Due to the War, above items made only in semi-pilot plant, but will be available after the war on a commercial scale if demands warrant.

WRITE FOR FURTHER DATA

CARUS CHEMICAL CO., Inc.
Makers
Potassium Permanganate
Box OP 364 La Salle, Ill.

Finest Medicinal
COD LIVER OIL

OLEOVITAMIN
A & D, U.S.P.

High Vitamin Potency
FISH LIVER OILS

VITAMIN A
Oils & Concentrates

VITAMIN A & D
Oils & Concentrates

GUNNING & GUNNING
601 W. 26th St., New York, N.Y.
Pioneers in the Vitamin Field Since 1922

CHEMICALS
DRUGS · OILS
Pharmaceutical *Industrial*

DISTRIBUTORS
DU PONT
REFINED
CAMPHOR U.S.P.
POWDER TABLETS

NOW, IMMEDIATE SHIPMENT of Powdered Form, Short delay on Tablets.

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SYNTHETIC

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LONDON AGENTS: Wheeler & Huisking, Ltd.
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AND ALKALOIDS OF AMERICAN MANUFACTURE
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PEDER DEVOLD
COD LIVER OIL
Imported U. S. P.

HAPPY COMBINATIONS

Vitamins A and D in most Pure Natural Cod Liver Oils are present in the right proportions to be most effective. In addition, their interaction enhances their biological effectiveness.

In PEDER DEVOLD'S COD LIVER OIL, U.S.P. there is also a combination of most desirable qualities: better than minimum potencies—*which are tested,* and a high degree of palatability—*which is tasted.*

PEDER DEVOLD'S OLEOVITAMIN A AND D USP
DEVOLD'S VITAMIN A AND D FEEDING OILS
IMPORT EXPORT

PEDER DEVOLD OIL COMPANY, INC.
155 VARICK STREET, NEW YORK, N. Y.
Cable Address: VITAMINE, NEW YORK All Standard Codes

AVERTING SHORTAGES...

Chrysarobin

● Before the war began, there was no problem in supplying the small amounts of CHRYSAROBIN needed in the United States. All the effort required was the dispatching of a cable to foreign manufacturers.

The manufacture of CHRYSAROBIN is an unpleasant task. The raw material involved causes a difficult irritation and requires special precautions as does the finished product.

Starting from scratch, CHRYSAROBIN manufacture was undertaken by S. B. Penick & Company. The difficult problem of securing the proper raw material, bringing it safely to the United States, handling it properly to avoid injury, then of producing the CHRYSAROBIN, was solved with reasonable speed and promptness in our experimental laboratories.

Thereafter, full-scale production was relatively simple and the needs of CHRYSAROBIN were well cared for. These needs can be met as long as raw material safely reaches the United States.

★ ★ ★

Number 10 of a series of advertisements on how S. B. PENICK & COMPANY is helping to avert shortages in important plant alkaloids which hitherto were imported from Europe.

S. B. PENICK & COMPANY

ALKALOID EXTRACTING MANUFACTURERS

50 Church Street
New York, N. Y.

735 W. Division Street
Chicago, Illinois

THE WORLD'S LARGEST BOTANICAL DRUG HOUSE

Botanical Drugs, Spices, and Gums

Calculation of Permitted Advances Over Prices Ceiled on Spices And Spice Seed Vex Sellers and Stop Trade—Domestic Medicinal Items Strengthen

Considerable margin existed between actual and normal business in the botanical drug market last week. Trade was considered slow, but no slower than it had been for some time past, and hence conditions might be described as unchanged in that respect.

In the condimental division of the market, sellers reported being plagued by all sorts of difficulties, the basis of which was ways and means accurately to calculate the costs which the Office of Price Administration permits them to add to the OPA price ceilings on spices and spice seeds. So real is the difficulty that trade has come virtually to a stop.

Domestic medicinal botanicals appeared to be entering a phase of renewed strength. The tendency upward was quite pronounced, stemming mainly from the fact that primary market prices are stronger in parallel with the fact that collection costs were raised during the season by the lack of a normal supply of labor.

Here again, in this medicinal group, is the question of ceiling prices and replacement cost arising to vex the trade. Recent rulings by Federal authority released primary market collectors from the limitations of the General Maximum Price Regulation, but left the botanical dealers under the full force of that regulation.

Balsams

Copaiba.—Market narrow. Mainly for jobbing quantities. Taken on hand-to-mouth basis. Prices hold.

Fir.—Demand steady. In good volume. Canadian balsam not too plentiful. Prices firm.

Sunflowers

This is addressed to Medical Authority, however and wherever constituted and faced with the problem of fighting malaria on the home front with something other than quinine.

Because the United States States forces are fighting in the fever holes of the Far East, all quinine in the United States is reserved by the Federal government for the medical corps to fight malaria from Pearl Harbor to Tokio—and that's where American fighting men are going.

Well, Medical Authority, here it is. Take a look-see into sunflower leaves as an anti-malarial. Russia did—as long ago as 1889. On authority the Russian Kazatchkoff, the Caucasians for years on end have effectively fought malaria with the leaves. And the practice and virtue reported by Kazatchkoff was confirmed as recently as 1929 by Danzel in the Review of Tropical Medicine.

While Medical Authority studies sunflower leaves as an anti-malarial, the Vegetable Oil Industry might toy with the idea that the Russians make oil from the seeds—$6,832,000 worth in 1911 to make margarin and textile soap.

And the Stockfood Industry might note Russian exports of 60,000 tons of sunflower seed cake to feed Danish cattle as long ago as 1906.

Meanwhile, the Chemical Industry might think about the Russian production in 1905 of 2,000 tons of crude potash carbonate from burnt sunflower stalks.

Finally, the Textile Industry might research the fact that by processing sunflower stalks like flax, the Chinese produce a textile so fine in quality that it is an even desirable addition to raw silk.

Perhaps the Medical Authority and the respective industries can use California sunflowers for other than the present purposes of feeding parrots, chickens, and, in roasted form, our Jewish fellow Americans.

Price Changes

Advanced

Condurango bark, 2½c. per lb.
Clove, Zanzibar, ½c. per lb.
Ginger, Jamaica, No. 2, 3c. per lb.
No. 3, 3½c. per lb.
Oregano herb, Mexican, ½c. per lb.
Spearmint leaves, 10c. per lb.
Wormseed, American, 1c. per lb.

Reduced

Cascara sagrada bark, 2c. per lb.
Colombo root, 1½c. per lb.
Caraway seed, Syrian, dewhiskered, 1c. per lb.
Cardamom seed, green, Alleppy, 5c. per lb.
Ceylon, 6c. per lb.
Ginger root, Cochin, bleached, 2½c. per lb.
unbleached, ½c. per lb.
Calicut, ¼c. per lb.
Juniper berries, 4c. per lb.
Licorice root, Indian, 3c. per lb.
Mustard seed, Washington, yellow, ⅛c. per lb.
Pepper, red, chillies, Sierra Leone, 1½c. per lb.
Rose flowers, pale, 4c. per lb.
Saffron, Mexican, 8c. per lb.
Sage, domestic, Dalmatian type, 30c. per lb.
Thyme, Spanish, 1½c. per lb.

Comparative Values

Index numbers compiled from forty typical botanicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
257.5	257.5	266.9	313.1

Market news that may have developed after this report was sent to press will be found on page 4.

Barks

Angostura. — Plentiful stocks and few buyers reported. Prices believed subject to shading. Much of spot supply held on consignment.

Black Haw. — Collection cost reported high in primary market. Labor a constantly dwindling force. Reasonable care believed sufficient to assure regular users with fair supplies over coming year.

Cascara Sagrada.—Spot price on basis of 26c. to 28c. per pound as to quantity. Reported in line with money paid in primary market for new peel. Some feel market here too low compared with first costs. Distinct difference in opinion exists.

Condurango.—Market higher at 14c. to 15c. per pound. Much firmer in keeping with replacement costs and difficulties. Not much demand current now.

Elm.—Signs of improved request not lacking. Pickup in inquiry not at normal volume but along seasonal lines. Fair sized spot reserves reported.

Fringetree. — Stocks conservative. Held in very firm quarters. Small sales noted during past week. Volume low.

Sassafras. — Fairly well sustained demand for packages of limited size. Volume demand still awaited. Undertones definitely on very firm side.

Wahoo.—Reserves believed not ex-

Current prices on botanical drugs and spices are given in the alphabetical list of prices beginning on page 9

CHECK THIS LIST
OF HOPKINS' ANALYZED, HIGH STANDARD
CRUDE DRUGS

The earth contributes and J. L. Hopkins & Company distributes every foreign and domestic botanical drug for which there is any commercial demand. A few of the many botanical drugs, ready for prompt or contract shipment from our New York City warehouses and mills, follow:

✓ ALOES
✓ ANISEED
✓ BALDO LEAVES
✓ BELLADONNA
✓ BENZOIN GUM
✓ BUCHU
✓ CELERY SEED
✓ CHAMOMILES
✓ CINCHONA BARK
✓ COCILLANA
✓ CORIANDER
✓ CORN SILK
✓ DANDELION
✓ ERGOT
✓ FENNEL SEED
✓ FOENUGREEK
✓ GENTIAN ROOT
✓ GINGER
✓ GUM ARABIC (all kinds)
✓ HENBANE
✓ HOREHOUND
✓ IPECAC
✓ IRISH MOSS
✓ JUNIPER BERRIES
✓ KOLA NUTS
✓ LAUREL LEAVES
✓ LAVENDER FLOWERS
✓ MARJORAM
✓ OLIBANUM GUM
✓ ORANGE PEEL
✓ PAPAIN
✓ PEPPERMINT
✓ PSYLLIUM SEED
✓ QUINCE SEED
✓ RHUBARB ROOT
✓ ROSEMARY
✓ SAGE
✓ SARSAPARILLA
✓ SENNA LEAVES & PODS
✓ STRAMONIUM
✓ STROPHANTHUS SEED
✓ UVA URSI
✓ VALERIAN
✓ WHITE SQUILLS

◆◆◆◆ QUOTATIONS AND SAMPLES ON REQUEST ◆◆◆◆

J. L. HOPKINS & CO.
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ANISE SEED, Bulgarian
BALSAM COPAIBA
BALSAM PERU
BALSAM TOLU
BELLADONNA Leaves and Root
BOLDO LEAVES
BORRAGE FLOWERS
BUCHU LEAVES
CANARY SEED, Moroccan 2%
CELERY SEED
CLOVES, Zanzibar
COCILLANA BARK
CORIANDER OIL AND SEED
CUMIN SEED
DANDELION ROOT
FENNEL SEED, Indian
FOENUGREEK SEED
GENTIAN ROOT
GINGER, Jamaica
GRAINS OF PARADISE
GUM ARABIC AMBER SORTS
HELLEBORE ROOT WHITE
HERBA HERNIARIAE
HERBE MENTHE
HOREHOUND HERB
IRISH MOSS
JUNIPER BERRIES
LAUREL LEAVES
LAVENDER FLOWERS
MAHUANG, Chinese
MALEFERN ROOT
MARJORAM LEAVES
OAK MOSS
PEPPERMINT OIL
PIMENTO, Jamaica
PSYLLIUM SEED AND HUSKS
QUINCE SEED
RHUBARB ROOT
ROSEMARY LEAVES
SAGE LEAVES
SARSAPARILLA ROOT
SAVIN OIL
SAVORY
SENNA LEAVES AND PODS
SESAME SEED HULLED
SQUILL ROOT
STRAMONIUM LEAVES
STROPHANTUS SEED
THYME LEAVES
UVA URSA LEAVES
VALERIAN ROOT

AMINOPHYLLINE
BARBITAL
COD LIVER OIL, Medicinal and Poultry Grades
EPHEDRINE SALTS
GUM CAMPHOR, Japanese
ICHTHAMMOL, N.F.
MENTHOL, Japanese
STRYCHNINE SULFATE
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COD LIVER OIL medicinal
CHLOROFORM

cessive. Sufficient for all probable demand. Prices show strength, due to high collection cost last Summer.

Beans

St. Ignatius.—Not much available. Likely to become steadily scarcer in absence of replacement opportunities.

Vanilla.—Availability of a $3.75 per proof gallon drawback to makers of extract expected to revive buying of beans. Sales dropped with chance for drawback being enacted into law appeared. Drawback is $7.12½ per wine gallon of 190-proof spirits. Bean prices hold firm.

Berries

Juniper.—Prices reduced to basis 34c. to 35c. per pound in dull market on spot.

Prickly Ash.—Collection not too impressive last Summer. Labor was short. Reserve in dealers' hands reported definitely conservative in size. Not much demand at moment.

Flowers

Arnica.—Strong and in low supply. Reserve in hand an improvement of that in fairly distant past. Demand hand-to-mouth.

Borage.—Quoted but available in quantities definitely doubtful in size. No replacement possible.

Chamomile.—Conditions favor buyers. Undercurrent of competition moves more swiftly. New crop coming along in Argentina. Expected to be good quality and size.

Clover.—No further shading but still subject to some unsettlement stemming from competition.

Malva.—Virtually extinct on spot. Likely so to remain. New sources of supply remain to be developed—if possible.

Mullein.—More demand. Finds firm market. No surplus stocks. Some on short rations.

Pyrethrum.—Outlet for every pound released by Federal authority exists. Armed forces' needs run high, especially in Far East. Civilian consumption cut to bone.

Rose,—Pale flowers on their way out. Market down to 35c. to 36c. per pound. Seems like a stock liquidation price. No red flowers available.

Saffron.—American down to 55c. to 56c. per pound. Spanish easy and highly competitive at $32.50 per pound minimum.

Gums

Aloe.—Strongly held as to Curacao item. Transport from source to spot irregular. Always dangerous.

Arabic.—Some look for eventual market improvement. Point to probable future costs. Banks forcing some low priced spot transactions. Arrivals heavy of late. Created some surplus in quarters unable to await market improvement.

Benzoin.—Very firm. More activity along jobbing lines. Covers seasonable needs. Stocks conservative. Fairly well concentrated.

Camphor.—Producers of synthetic article report no price change in sight, this time. Last change was decline despite rise in consumption and difficulties surrounding expansion of output. Little natural gum left on spot.

Karaya.—Future arrivals greatly in doubt. Import possible only under Federal permission. No strings on sale of actually spot gum. Market holding very firm.

Mastic.—None known to be available. Market leaders say impossible to get goods from source. Unlikely to get them through transhipments or in markets still open to transportation.

Sandarac. — Stocks short. Some have very low ceilings, costs considered. Occasional lots picked up from former users.

Olibanum. — Demand better than supply. Very firm situation. Not much local competition due to replacement troubles and costs.

Tragacanth. — Further imports depend on Federal permission. Makes actual spot goods potentially more valuable. No restrictions on sales out of spot stocks. Prices definitely on firm side at moment.

CRUDE DRUGS

PEEK AND VELSOR INCORPORATED
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TRADE MARK

Note Well!— Ye Rug Cutting Hep Cats

"Catnip is Used in Head Pains Coming of Swimming and Giddiness."

—*Culpeper*

THE ASTROLOGER-PHYSICIAN in 1656 Gave

CATNIP

For Intestinal Wind
For Stomach Ache
For Short Breath

Is an Anti-Spasmodic and Anodyne Used In American Medicine Today

Herbs and Leaves

Aconite.—Mighty difficult to get at any price. Not much call today.

Belladonna. — Market quiet but steady. Reserves believed ample for all normal requirements over coming year. Fair distribution of stocks. Less local competition than of late. Some goods still in hands of growers who report little interest in offerings.

Buchu.—Definitely on firm side. Practically no competition. Forward position alone assures strong price position. Current spot demand light.

Coltsfoot. — In moderate reserve. More inquiry reported. Call along seasonal lines. Undertones and prices very steady.

Digitalis.—Well held in steady position. Call moderate but retains steady qualities. Quotations reported on steady to firm basis.

Horehound.—Should do better, Current market routine and productive of conservative volume. Prices hold steady.

Laurel. — Very steady following stabilization of values. Demand on jobbing basis fails to bring assessment to current quotations.

Oregano.—Firmer with some gain in movement. Sales at 17c. to 18c. per pound. Fair stocks here. More in primary market pressed for sale.

Sage. — Dalmation type domestic item lower—sharply so. Offered spot at 90c. to 94c. per pound. Limited buying on new basis. All other kinds reported steadily maintained.

Spearmint.—Held for the higher price of 35c. to 36c. per pound. Country costs rose last Summer. Present primary market stocks held in firmer to stronger price position.

Thyme.—Lower at minimum of 24c. per pound for Spanish goods. Selling for under official price ceiling.

Miscellaneous

Cantharides.—Not an offer made out of spot supplies—if there be any. Purely nominal position not likely to improve. Normal primary markets closed tight against successful exports.

Cassia Fistula.—Reasonably active. Firm to steady undertones. Reserve stocks conservative. Replacement in lap of gods.

Colocynth Pulp.—No change in minimum spot price. Narrower range continued. Undertones seem to have softened. More competition in offing.

Dragon's Blood.—Steadier following decline, previous period. Sellers show reserve in treating with new manufacturing consumers. Old friends get first call.

Ergot.—Quiet but fairly steady following recent substantial price drop. Current business on small side. Large consumers noted with arrivals from primary market recently.

Lupulin.—Reported easier and in better supply. Prices down to $1.50 to $1.60 per pound. More competitive market.

Nux Vomica.—Situation gets tighter as forwarding from existing primary market gains difficulty and irregularity. More liberal allocation of steamship space would aid situation considerably.

Roots

Aconite.—In shortest possible supply. Practically nominal. Sellers reserve holdings for regular customers.

Belladonna. — Plenty in store and more may be obtained. Not much current demand from consumers. Prices loose and easy.

Colombo.—Reduced to 10c. and 11c. per pound. Stocks ample to point of repletion. Consuming outlets few and far between.

Cube. — Every pound obtainable held for uses essential to progress of war program.

Derris. — Position identical with cube, above.

Gentian.—Reports suggest presence considerably below par quality root. Good grades command full prices with little difficulty.

Helonias. — Selling around 82c. to 83c. per pound. Replacement cost—the collectors have no ceiling—preclude sales under 82c. without entries being made in red ink.

Licorice.—After long absence, some good quality Russian goods became available. Stocks in neighborhood of 380,000 pounds. Also, plenty of Indian root seeking owners. Little success meets holders of consigned goods. Indian, spot, down to 12c. and 13c. per pound. Bids solicited.

Lovage.—The domestic root alone capable of meeting needs. Practically no foreign goods available. Last sold at $4.50 per pound.

Rhubarb.—No reason for anyone to weaken on this item. Story of supply China root continuously one of shrinking reserves and impossibility of replacement. Root from other sources developed.

Senega.—Quiet to dull. Prices hold, apparently steady. Believed that reasonable bids have reasonable chances of acceptance.

Serpentaria. — Steady. Not called for often. Nor in more than jobbing quantities. Fair stocks believed available. Fair stock distribution.

Snake. — Canadian root selling around 66c. to 67c. per pound. Much stronger position, all directions. Some cannot sell because of ceiling restrictions to dealers. None on the collectors.

Squill.—Buyers of white root get glad hand on spot. Business poor for many weeks. Still limited.

Valerian. — Pressure downward on prices still in evidence on Eastern root. Still small supply of Belgian root available. Not much consumer demand at moment.

Seeds

Anise.—Steady position, all grades. Some in low supply. Particularly star seed. Demand moderate to light.

Canary.—Attempts to push Mexican seed meet limited success. Price too close to Argentine seed prices to attract buyers.

Caraway.—Completely barbered variety—dewhiskered, in trade argot—lower at 57c. to 58c. per pound for Syrian item. Other kinds unchanged but practically nominal.

Cardamom.—Bleached ranging $1.70 to $1.80 per pound. Decorticated, $1.55 to $1.60. Green, Alleppy or Ceylon, lower at $1.05 to $1.10.

Celery.—Weak. Poor demand. Plenty of Indian seed seeking new owners.

Coriander.—Steady at prices substantially below official ceiling. Demand light. Mainly jobbing.

Cumin.—Ceiling prices not yet obtained. Spot quotations far below. Current call light, irregular, almost spasmodic.

Fenugreek.—California crop well sold. Prices turn steadier.

Larkspur.—New crop steady at recently lowered prices.

Mustard. — Montana seed moving more regularly and in larger lots. Washington yellow seed shaded to 6¼c. to 6¾c. per pound. No other price change.

Niger.—Steadier but not lowered again. Current call mainly jobbing.

Poppy.—Quiet to dull. Prices, Turkish and Indian seed, about steady. Some tendency to accept bids noted.

Pumpkin.—Stocks likely to be less. Less canning of pumpkin results from labor shortages. Large demand for seed available around 6c. per pound.

Sabadilla.—No surplus supply. Not much current call. Good future prospects. Prices on firm side.

Wormseed.—American seed higher at 8c. to 9c. per pound. Ceiling restrictions prevents establishment proper relation between cost and sales prices.

Spices

Allspice.—Steady. Full ceiling prices obtained.

Cassia.—Almost nominal. Stocks small. Poorly distributed. Nothing sold at ceiling prices can yield profit, 'tis said.

Cinnamon.—Almost nominal but exceptionally steady where goods actually exist on spot.

Clove. — Spot Zanzibars fraction higher at 18¾c. per pound. Considerably below prevailing ceiling.

Ginger.—Easier price trend, except in Jamaica root. Cochin, bleached, down to 26c. per pound; unbleached, 25c.; Calicut, 25¼c. Jamaica higher, due allowance being for permissioned additions. No. 1, 39c. per pound; No. 2, 39c. to 40c.; No. 3, 38½c. to 39c.

Mace.—In low supply. Stabilized, mainly by scarcity and ceiling factors.

Paprika.—Slow market. More tendency toward competition. Fair stocks seeking new owners.

Pepper.—Definitely on firm side in blacks and whites. Sierra Leone chillies shaded to 22c. to 22½c. per pound. Domestic type Japanese Hontaka chillies lower at 38c. to 39c. for fair quality merchandise.

Trading in black pepper futures on the New York Produce Exchange from October 26 to October 30, inclusive, comprised 6 contracts. Following is a price record for the week:—

	Cents per pound—		
	High.	Low.	Close.
October	6.46	6.45	6.46 bid
December	6.57	6.54	6.54@ 6.60

— OPD : 72d Year —

Paint Production Clubs Doings

C.D.I.C.

The Cincinnati, Dayton, Indianapolis, Columbus Paint and Varnish Production Club October meeting heard F. S. Greenawald, of the Nuodex Products Company, who spoke on "Comparative Efficiency of Driers at Elevated Temperatures." The speaker reported on a one-and-one-half years' investigation of drier efficiency at baking temperatures of 200, 250 and 300°F. Combinations of tung, oiticica, linseed, or dehydrated castor with modified phenolic, 100 percent phenolic, maleic, batu or congo resins in 12½ and 25-gallon lengths were tested. Alkyd resins modified with dehydrated castor, soya, linseed, or linseed plus phenolic resin were also included. Tests were run on TiO_2 white and carbon black enamels. In the tests cobalt and manganese were used as the active drier, with lead, calcium, zinc, and iron as auxiliary driers. The optimum drier combination varied with the oil and resin, and few generalizations could be made. The tests indicated that manganese was a much better drier in baking enamels than commonly thought.

Northwest

Discussion and consideration of the various specifications on paints and paint materials prescribed by the Federal government authorities, in calls for bids on contracts, constituted the principal feature of the business program at the October meeting of the Northwest Paint Production Club.

C. E. Hepberger, of National Carbon Company, spoke briefly on the value of accelerated weathering tests on various specification paints and the part played in the war effort by the "weatherometer." J. Kaiser, of the Reichold Chemical, Inc., talked at some length on specifications in general and the kinds of raw materials meeting these specifications.

St. Louis

The September meeting of the St. Louis Paint and Varnish Production Club heard Dr. Alexander Schwarcman, research director of the Spencer-Kellogg & Sons, who talked about the past, present and future research work on drying oils. He pointed out that research chemists had first found that vegetable oils could be hydrogenated to give any desired melting point.

Dr. Schwarcman said that the research chemists then logically turned to dehydrogenation, which holds much promise for the future. Research has also improved methods for separation of the drying and non-drying portions of the vegetable and fish oils. The newest of the developments has been the chemical shifting of unsaturated bonds to improve the drying properties of the oils. The effect of the glycol, glycerol or other higher alcohol portion of the molecule has also been studied, and interchange of these portions shows future possibilities.

Toronto

The September meeting of the Toronto Paint and Varnish Production Club heard W. H. Butler, of the Bakelite Corporation. He told the meeting about new resin developments and their use in water emulsion paints.

Western New York

The October meeting of the Western New York Paint and Varnish Production Club was marked by the incoming officers assuming their duties. The new officers are:—President, A. R. Schuster, of the Durez Plastics & Chemical Company, North Tonawanda; vice-president, William Lutz, of Pratt & Lambert, Inc., Buffalo; secretary, M. Catena, of McDougall-Butler Company, Buffalo, and treasurer, H. L. Johnson, Pratt & Lambert-Inc.

J. Ashman, of the New Jersey Zinc Company, addressed the meeting on "Comments on Today's Traffic Paint Problems." The talk was accompanied by slides, showing the methods employed in evaluating traffic paints and their component ingredients.

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Dr. W. Nelson Returns To WPB Mining Branch

OPD Washington Bureau

Dr. Wilbur A. Nelson has resumed his duties as administrator of the Mining Branch of the War Production Board. He has been serving recently as a special assistant on certain mining problems to A. I. Henderson, Deputy Director General for Industry Operations. Dr. Marcellus Stow, who served as acting administrator during this period, will resume his duties as assistant administrator of the Mining Branch.

Maury Maverick, chief of the Bureau of Governmental Requirements, has appointed William A. Adams as a special assistant. Mr. Adams was chief of the Furniture Industry Branch until its recent consolidation with the Consumers Durable Goods Branch. Prior to coming to Washington, Mr. Adams was a consultant to the construction, aircraft and chemical companies, with his office in New York.

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KARAYA (Indian Gum) ★ LOCUST BEAN
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D. S. DALLAL, 261 Fifth Avenue, New York
IMPORT EXPORT

VANILLA BEANS
ZINK & TRIEST CO.
15 Lombard Street Philadelphia Pa.

Industrial Uses of Chemicals and Related Materials

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(Parenthetical figures are the numbers of patents in the United States or other countries, as designated)

Arnica Fluid Extract

(Fluidextract of Arnica Flowers, Fluidextractum Arnicae Florum)

Chemical

Denaturant for—
Alcohol

Pharmaceutical

In compounding and dispensing practice
Reputed useful as—
Alterative
Stimulant
Vulnerary

Bay Oil

(Oil of Bay Laurel, Oil of Myrcia, Oleum Myrciae)

Chemical

Denaturant for—
Alcohol

Cosmetic

Compounding agent in making—
Aromatics
Bay rum
Hair tonics
Rubbing preparations (alcoholic)
Shaving lotions
Scalp remedies

Pharmaceutical

In compounding and dispensing practice
Reputed useful as—
Antiseptic

Brucine Sulphate

(Dimethoxystrychnine Sulphate)

Chemical

Denaturant for—
Alcohol (S.D. 40)

Pharmaceutical

In compounding and dispensing practice
Reputed useful as—
Paralyzant to the sensory nerves

Chocolate

(Covers uses for bitter, sweet, and milk chocolates)

Beverage

Flavoring agent and base in making—
Dispersed chocolate drinks
Syrups and flavors

Dairy Products

Flavoring agent and base in making—
Chip fillings for ice cream
Coatings for bar ice creams
Syrups for health drinks, milk drinks, ice cream, powdered milk products

Food

As a candy
Coating agent in making—
Chocolate candies, bon-bons, fondants, coated creams, coated nuts, fruits and the like
Coated crackers, bakeries, etc.
Flavoring agent and base in making—
Bakery products, such as cake batters, pie fillings, and the like
Desserts, such as puddings, junkets, and the like
Icings
Sauces
Syrups

Military

As an "iron" ration

Pharmaceutical

In compounding and dispensing practice—
As a coating
As a disguise for bitter medicines
As a flavoring

Tobacco

Flavoring agent for—
Tobacco products

Copaiba Oil

(Copaiva Oil, Copaivaoel, Copaivaol, Esencia de Copaiba, Essence de Copahu, Essenza de Copaive, Huile de Copahu, Huile de Copaiba, Huile de Copaiva, Oleum Bolsami Copaivae, Oleum Copaibae)

Chemical

Preservative for—
Potassium
Solvent for—
Phosphorus
Sulphur

Ink

Ingredient of—
Fingerprinting inks

Paint, Varnish, and Lacquer

Drying oil for—
Enamels
Fine colors
Lacquers
Paints
Varnishes

Pharmaceutical

In compounding and dispensing practice
Reputed useful (with caution) in treating—
Bronchitis
Catarrhs
Dropsy
Gonorrhea
Hemorrhoids

Photographic

Process material in—
Photographic processes

Textile

Ingredient of—
Color printing compositions

Diphenyl Carbonate

(Carbon Dioxide Diphenylester, Carbonic Acid Diphenylester)

(Additional uses — supplementary to information in the book, Uses and Applications of Chemicals and Related Materials—see bottom of this page)

Chemical

Chemical material having following properties—
Boiling point, 302°C.
Density, 1.1215(87/4)
Insoluble in water
Melting point, 78°C.
Readily undergoes hydrolysis
Readily undergoes ammonolysis
Soluble in acetone, hot alcohol, benzene, carbon tetrachloride, ether, glacial acetic acid, other organic solvents
White crystalline solid or white needles from alcohol
Starting point in making—
Halogenated derivatives
Nitrated derivatives
Other carbonates by substitution

Miscellaneous

Plasticizer for—
Nitrocellulose

Nickel-Molybdenum-Ammonium Complex

(A complex salt probably conforming to the formula $[Ni(MoO_4)_6]H_6(NH_4)_4$*)*

Miscellaneous

Addition agent (Germ. 665462) to—
Lacquer coatings for demonstrating temperature at given spots (for example, coating on an air-cooled combustion motor would permanently change the greyish-white in spots where the temperature became 180° to 210°C.)
Temperature indicator (Germ. 665462) offering—
Permanent color change to greyish-white at 180° to 210°C.)

Peppermint Oil

(Esencia de Menta Piperita, Essence de Menthe Poivree, Essenza di Menta, Huile Volatile de Menthe Poivree, Oleum Menthol Piperitae, Pfefferminzoel, Pfefferminzol)

Chemical

Denaturant for—
Alcohol
Source of—
Menthol (U.S.A. source as substitute for Japanese source)

Cosmetic

Aromatic in—
Bathsalts
Dentifrices
Mouthwashes
Perfumes
Shampoo preparations
Toilet waters
Flavoring agent for—
Cosmetic preparations
Dentifrices
Mouthwashes

Disinfectant

Germicide (used by the Egyptians more than 3,000 years ago for treating wounds)

Distilled Beverage

Flavoring agent in—
Cordials
Liqueurs
Other alcoholic drinks
Starting point in making—
Essence of peppermint

Food

Flavoring agent in—
Candy
Confectionery
Chewing gum
Masking agent for—
Products having unpleasant taste or odor

Pharmaceutical

Flavoring agent and aromatic in—
Liquids
Lozenges
Tablets
In compounding and dispensing practice
Reputed useful as—
Antiseptic
Carminative
Menthol substitute (to some extent) in preparations
Digestant
Gastric stimulant
Reputed useful in treating—
Colic
Flatulence
Gastralgia
Indigestion
Nausea
Pharyngitis
Starting point in making—
Essence of peppermint

Soap

Aromatic in—
Special soaps

Surgical

Sterilizer for—
Catgut ligatures

Persic Oil

(Apricot-Kernel Oil, Expressed Oil of Persicot, Huile de Peche, Huile Persique, Oleum Percicae Expressum, Oleum Persicorum, Peach-Kernel Oil, Pfirsichkernoel)

Cosmetic

Substitute for—
Sweet almond oil

Fats, Oils, and Waxes

Substitute for—
Olive oil
Sweet almond oil

Phenyl-Mercury Chloride

(Phenyl-Mercuric Chloride)

(Additional uses — supplementary to information in the book, Uses and Applications of Chemicals and Related Materials—see bottom of this page)

Chemical

Denaturant for—
Alcohol

Sodium-Ethyl-Mercuric Thiosalicylate

Chemical

Denaturant for—
Alcohol

Strychnine Glycerophosphate

(Glicerofosfato de Estricnina, Glicerofosfato di Stricnina, Glycerinphosphorsamesstrychnin, Glycerophosphate de Strychnine, Strychninae Glycerophosphas, Strychnine Glycerinophosphate, Strychninglycerinphosphat)

Pharmaceutical

In compounding and dispensing practice
Reported useful as—
Nerve tonic
Reported useful in treating—
Debility
Nervous conditions
Neurasthenia

Tung Oil Fatty Acids

(Acides Gras d'Huile d'Abrasin, Acides Gras d'Huile de Bois, Acides Gras d'Huile de Bois de Chine, Acides Gras d'Huile de Canton, Acides Gras d'Huile d'Eloeeococca, Acides Gras d'Huile de Hankow, Acides Gras d'Huile de Tung, Acidos Grassos de Aciete de Madero Chino, Chinawood Oil Fatty Acids, Chinese Wood Oil Fatty Acids, Chinesisches Holzoelfettsaure, Elaekokoelfettsaure, Holzoelfettsaure, Oelfirnisbaumoelfettsaure, Wood Oil Fatty Acids)

Paint, Varnish, and Lacquer

Raw material in making—
Driers
Varnish compounds
Substitute for—
Shellac

Vinegar

(Continued from October 26 issue)

Lumbering

Ingredient of—
Lumber branding inks

Mechanical

Compounding agent in making impregnating agents for—
Brake linings
Friction linings
Gaskets
Packings

Miscellaneous

Ingredient of—
Antidimming compositions
Antimisting compositions
Automobile polishes
Ceramic ware-cleaning compositions
Cleaning compositions of various sorts
Etching solutions
Furniture polishes
Glass-cleaning compositions
Metal-cleaning compositions
Shoe polishes
Wood polishes

Pharmaceutical

In compounding and dispensing practice
Reputed useful as—
Astringent
Reputed useful in treating—
Hematemesis (in a diluted form)
Seat worms (used in the form of an enema, diluted with three times its bulk of water)
Sunburn (compounded into a paste with glycerin, a bismuth salt, and starch)

Xanthene

Fungicide and Insecticide

Suggested as—
New insecticide

Need a New Material?—Consult—

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Essential Oils, Aromatic Chemicals

Substitutes and Imitations for Scarce or Unobtainable Natural Products Get Good Play—Essential Oil Demand May Revive Under Influence of Cheaper Alcohol

Although demand for essential oils remained on a conservative basis last week, reason to look for an improvement in trade was found in the action of Congress in providing for a drawback on alcohol taxes where pure alcohol is used in producing flavoring extracts. Activity in the extract trade fell substantially once it seemed likely that cheaper alcohol would be available under provisions of the new revenue. Well, the cheaper alcohol is available and revival of manufacturing is not unlikely.

The position of synthetic aromatics, in the matter of supply, was not less acute than it had been. The pinch comes mainly by dealers who act as distributors of these entities. While output of producers has been curtailed to some extent, they still do a fair job in deliveries direct to manufacturing consumers. When that has been done, not overly much is left for dealers-distributors and many are totally without stocks. A sign of the situation is found in the withdrawal of all prices in many dealers' trade lists.

Substitute, imitation, and replacement materials continued to find good markets. The three descriptive names represents efforts of the trade to supply equivalents of scarce or unobtainable natural products. Prices vary widely with product.

Essential Oils

Almond. — Rather quiet market. Most orders jobbing in size. Volume off slightly, some quarters. Quotations well maintained.

Amber.—Practically out of the market. Few odd lots still unabsorbed. Quotations mainly lacking, all directions.

Angelica.—Firm to strong market. Position based on absence normal reserves. No chance of getting new stocks short of winning the war.

Anise.—Substitutes getting very good call. One excellent replacement item quoted $1.26½ per pound against genuine oil almost nominal at $2.75 per pound.

Apricot.—Firm to steady. Fair stocks, locally and primary market. Demand steady but not expansive. Quotations well stabilized.

Avocado.—Well established market. Demand irregular and on quiet side. No weakness to price structure. Competition under restraint.

Bay.—New arrivals noted. Spot goods well stabilized. Demands maintained close to recent levels. Fair reserves, all markets. Transport a problem from source to spot.

Bergamot.—Some South American oil available, spot. Practically no pure, unadulterated, unsophisticated Italian oil available.

Birchtar.—Firm to steady. Market rather dull. Top quality Russian oil very scarce. Many have nothing to offer.

Bois de Rose.—Steadier, most quarters. Spot identical with primary market. Undertones grow firmer. Demand improves.

Cajeput.—Quiet but very firm. Normal qualities not readily come by. Quotations show strength and stability. Little competition.

Calamus.—Omitted from schedules of practically all essential oil houses.

Camphor. — A water-white oil of American origin quoted 23c. per pound, drums, and 25c. in cans. Chinese around 30½c. when available.

Cananga.—Local stocks about wiped out. A few pounds remain. Quotations virtually on nominal basis. Most former dealers out for the duration.

Caraway.—A good substitute would get a good call. Natural oil all but extinct. Virtually nominal price position.

Cardamom.—Strong position. Market understocked. Some without any goods to offer. Replacement would depend on successful home distillation.

Cedarleaf.—Very firm. Outlook favors satisfactory consumption in future. Reserves moderate to light, most quarters.

Cedarwood. — Producers find good outlets for current moderate output. Stocks limited in spot quarters. All prices on very firm basis.

Celery. — Talk of price shading.

Russian Oils

The seaman seated alongside on the ferry boat had just reached port after a return trip from Russia in a convoy all ships of which did not get through.

Outbound under the protection of the United States and British navies, the ship had reached a Russian port loaded from keel to bridge with munitions destined for ultimate delivery to Hitler via Russian guns on the Volga front.

Usually, said the seaman, we come back in ballast. But not this time. The Russians, said he, are fighting a damn good war and get little time to move Russian products to convoy ports for loading on returning freighters. So, to find a cargo of Russian goods ready for loading was something of a surprise after the munition cargo was ashore.

The seaman was eternally right on all points. Despite the Hitler war machine lying athwart the Ukraine and Caucasus, apparently the infant essential oil industry has not yet been ground into the dirt. Russian oils and other products have been shipped vast distances over railroads glutted with the movement of Russian troops and supplies and placed aboard freighters bound back to the United States and another load of American products designed to kill Germans.

Where these Russian oils are loaded, what ship carries them, and where they arrive here are military secrets. But it is good to report that some Russian oils and products are coming through safely. It is also good to report that the essential oil industry of which Russia had been justly proud still exists together with the will and ability to get Russian oils aboard ship. That Russian geranium oil, one of the newer products of Russian flower cultivation, and Russian licorice root, one of her oldest articles of commerce, now stand on American piers is good news and a tribute to a great people, a brave merchant marine, and an intrepid navy.

Price Changes

Advanced

None

Reduced

Dillseed oil, 20c. per lb.
Lime, distilled, West Indian, 25c. per lb.
Wormseed, 10c. per lb.

Comparative Values

Index numbers compiled from twenty typical essential oils on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
281.6	281.9	283.0	228.8

Market news that may have developed after this report was sent to press will be found on page 4.

Current prices on essential oils and aromatic chemicals are given in the alphabetical list of prices beginning on page 9

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Curious, in view of extremely short spot supplies. High as $40 per pound actually obtained at times.

Cinnamon. — Substitutes getting a play. Imitation item of excellent properties offered at $6.25 per pound. Genuine oil quite scarce.

Citronella.—Reserves of Ceylon oil very fair. Java extinct on spot. Will be replaced when United States reconquors Java. Substitutes finding consumption field. Some replacements offered low as 41½c. to 47½c. per pound.

Clove.—Strong undertone prevails. Uncertainties and difficulties of raw material replacement a factor. No signs of early shipments either spice or oil from Madagascar.

Copaiba.—Selling well on basis of 92c. per pound for strictly U.S.P. article.

Coriander. — One quarter quoting $22.50 per pound. Others want upwards of $35.50. Most usual sources not offering at all.

Croton.—Turning slightly firmer as stocks show recession. Demand along routine lines, mainly jobbing in size.

Dill.—Seed oil slightly cheaper at $7.80 per pound but stock remains small. Weed oil quiet to dull with season for consumption at an end. Some sellers already attempting contract negotiations for next year.

Erigeron.—Little demand. Only jobbing in size. Undertones steady. Stocks small but thought sufficient.

Eucalyptus.—Firm. Tough, dangerous route traveled by replacement oil. Shipping space not readily available. Prices well maintained everywhere.

Fennel.—Some Russian oil reported at $3.30 per pound. Usual article around $4.20. Limited interest at moment.

Geranium.—Some oil gets here from Russia. Quoted $17.90 per pound. Oil from regular sources in extremely low supply. No signs of resumption shipments despite British control of surrounding areas.

Grapefruit. — Export interest reported. Requests received for prices and assurance of shipping space.

Ginger.—Many have none. Few have any. Strong and practically nominal price and stock position. All due to raw material uncertainties.

Juniper.—Berry oil needs new consuming channels. End of gin making tough on infant American juniper distilling industry.

Lavender. — Imitation oils finding wider market. Offered around $3.55 per pound. Limited quantities natural oil—and very limited—noted around $8.50 to $12 per pound, if and when available.

Lemon. — Domestic consumption very fair. Should increase as extract makers return to operations on basis of substantial drawback on prices paid for alcohol. Export inquiries developing.

Lemongrass.—Quiet and fairly easy under very good supplies of home and near-to-home production. Imitation product does well around 85c. per pound. Domestic oil, $1.50 per pound minimum.

Lime.—West Indian oil down slightly to basis $9.25 per pound. Mexican oil around $8. Might be shaded. Expressed oil scarce and very firm.

Mace.—Holding firm and well stabilized. Stocks conservative. Output of producers well sold ahead. Creation of reserve difficult.

Nutmeg.—Same position as Mace, above.

Mustard.—Most needs being met on fairly prompt basis out of spot stocks. No important reserve in hand. Prices hold firm, all quarters.

Orange.—Most varieties not too firm in price. Competition active. Supplies, imported oil, ample. California oil retains stable position.

Origanum.—Spanish oil steady to firm. Inquiry fair. Sales volume moderate. Undertones show substantial strength abroad.

Palmarosa.—Quiet but very firm. Stocks not overly plentiful. Sellers show reserve. Prices thoroughly maintained on regular quality oil.

Pennyroyal.—Imitation of European type oil reported moving well around $1.70 per pound. Natural oil remains strongly placed and held.

Peppermint.—Apparently stabilized. Leading Western dealers retain steady price position. Government interest fails to abate. Spot very steady. Demand rather quiet.

Petitgrain. — Some fine quality French oil talked about around $10.50 per pound. Paraguay oil in steady position. Not much competition.

Pineneedle.—Hard to lay hands on genuine Siberian oil. Substitutes around $1.50 to $2.05 per pound.

Rosemary.—Demand moderate to fair. Stocks fair in size. Prices show market stability and freedom from fluctuation.

Rose.—Very little available. Synthetic material gets play. Selling around $16.50 per pound. Domestic production a possibility. Expensive operation in this country.

Sandalwood.—Deliveries to leading pharmaceutical houses on very fair basis. Stocks of producers reported meeting needs well.

Sassafras.—Natural oil rejuvenated by scarcity of artificial material. Movement steady along routine lines.

Skunk. — Offering, spot, refined item, 25 pound tins, at 48c. per pound.

Spearmint.—Steady. Minimum $3 per pound. Maximum around $3.50. Demand mainly for small quantities most of time.

Sweet Birch.—Orders not overly abundant in most quarters. Replacement cost serves as stabilizer of spot values. Stocks in fair shape.

Wormseed.—Shaded to $3.85 to $4 per pound under competition. Current domestic consumption moderate. Revival certain in Spring.

Aromatic Chemicals

Methyl Acetophenone.—Quiet but on firm side. Little competition.

Methyl Benzoate. — Inquiry and sales on very good basis. Firm tone.

Methyl Cinnamate. — Not overly plentiful. Very firm.

Methyl Heptenone. — Sold around $3.25 per pound when available.

Methylhexyl Ketone. — Perfumer quality very firm. Demand routine.

Methylnaphthyl Ketone.—More inquiry for perfumers' quality. From broader consuming field. Undertones gain firmness.

Methyl Salicylate.—Excellent production job done despite heavy consumption raw material in essential war industries.

Musk.—No genuine need of regular consumers going unsatisfied. No surplus stocks, but enough to go around under discriminating sales policy.

Phenylacetic Acid.—Not well stocked. Many dealers hold only token supplies. Producers report fair output going into substantial consumption.

—*Continued on page 91*

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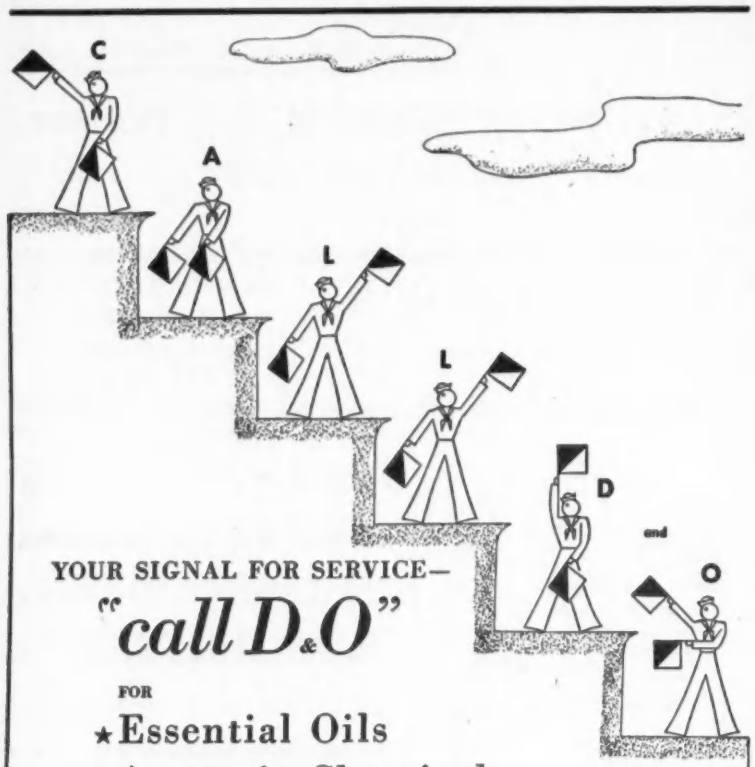

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Petroleum Products

Shortage of Naphthas and Liquefied Gases Made More Acute By Commandeering of Output at Several Western and Pacific Coast Refineries—Some New Production Arranged

Virtual commandeering of the light hydrocarbon output in several prominent refineries in the Southwest, Middle West and Pacific Coast areas, by war bureaus desirous of assuring a steadily expanding source of 100-octane gasoline for our air forces, is adding further complications to the problem of supplying consumers with adequate quantities of high solency aromatic and other naphthas as well as liquefied gases and other refined petroleum products from regions already plagued by inadequacy of transportation facilities. Besides a dearth of tank ships at Gulf ports, there is a scarcity of tankcars and tank-trucks, suitably equipped for carrying these refinery products.

In the market for the high-solvency aromatic naphthas, where the shortage, due to the commandeering of refinery yields has been made more acute by the placing of nine of these products, with distillation points below 330 degrees, under complete allocation control, some relief is about to be afforded by the eastern agents of a California plant, engaged in making two of these now-allocated naphthas until it assented to commandeering proceedings. These agents have now obtained governmental assent to entering into the business of supplying these products from an assembly plant in New Jersey and are now offering them to those obtaining authorization for their use. Still further relief from the shortage of these materials is being given by the production of substitute products having distillation points only slightly higher than the 330 degree limitations.

Meanwhile, however, production of crude petroleum in the various fields is still falling short of the 4,000,000-barrel daily average goal set by the OPC. For the week ended October 24, domestic crude oil output was swelled by 14,850 barrels to a daily average of 3,925,000 barrels but there has been no adequate increase in rail shipments into the Atlantic seaboard, those for the last week having shown a daily average of 759,233 barrels, or 11½ percent less than the anticipated average of 900,000 barrels per day.

Even the otherwise cheering news that the War Production Board has approved a $60,000,000 project for extending the half-completed Texas-Illinois pipeline from Norris City, Ill., 857 miles to New York and Philadelphia, assuring swift delivery of 300,000 barrels of crude oil daily to eastern refineries directly from Texas fields, has been shown to be of little immediate benefit as it will require many months to build.

Price Changes

Advanced

Crude petroleum, in Lima field, 25c. per bbl.
Kerosene, Oklahoma-Kansas, 41-43 waterwrite, bulk, in tanks, ¼c. per gal.

Reduced

Kerosene, Gulf ports, 41-43 water-white, in bulk, ¼c. per gal.

Market news that may have developed after this report was sent to press will be found on page 4.

Solvents and Diluents

Aromatic Solvents.—A development of unusual interest, as tending to relieve the shortage of high-solvency aromatic naphthas, is foreseen in the announcement that the eastern agents of the big Pacific Coast refinery, whose output has recently been commandeered by government authorities to swell the production of aviation gasoline, have made arrangements for the assembly of materials and supplying of two of these naphthas formerly made by this refinery, with distillation points under 330 degrees, from a plant in New Jersey to consumers in the New York and New England areas possessing the necessary authorization for obtaining these products which are now under complete allocation control. These agents for the Pacific Coast refinery are also marketing a substitute product outside the allocation limits. Another large refinery enterprise which boasts a big petroleum products research organization, has put on the market a high-solvency aromatic naphtha having a distillation point of approximately 332 degrees which is proving highly satisfactory and consumers unable to obtain the necessary authorization for securing the allocated products are having further recourse to the aliphatics and other substitutes. Prices are being well maintained on all these materials.

Cleaners' Naphtha. — Continues in brisk demand. Supplies, however, are none too plentiful and the tone of the market is exceedingly strong.

Lacquer Diluent. — a sizable buying interest is being manifested in this product by the paint industry. Stocks are being rapidly reduced and prices strongly maintained.

Mineral Spirit.—A moderate movement is reported. Supplies are somewhat diminished. Tone strong.

Rubber Solvent. — In light inquiry. Supplies continue ample, although being steadily drawn upon. Prices steady.

Stoddard Solvent.—In scanty supply because of unabated difficulties in obtaining adequate transportation facilities. Prices strongly maintained.

V. M. & P. Naphtha.—Although the war industries continue to absorb a large percentage of offerings, the paint trade is also securing a sizable amount of this naphtha. Stocks are being lowered daily and production is falling behind current demand. Prices firmly held.

Markets at Other Centers

Chicago—October 30

Aromatic Solvents.—War control continues as main factor, market strong.
Cleaners' Naphtha. — Buying good, prices steady.
Lacquer Diluent.—Interest active, market firm.
Mineral Spirit.—Movement good, quotations stiff.
Rubber Solvent.—Good demand reported, prices steady.
Stoddard Solvent.—Suppliers in firm position, no price change.
V. M. & P. Naphtha.—Interest brisk, market holding.

San Francisco—October 30

Aromatic Naphthas.—Buying interest is high.
Lacquer Diluent.—The call for lacquer diluents is brisk.
Rubber Solvent.—Most routine takings; demand not too brisk.
Stoddard Solvent. — Shipments are good.
V. M. & P. Naphtha.—Suppliers are experiencing difficulties in meeting the trade's needs.

Tulsa—October 30

Scarcity of transportation facilities and an unabated shortage of most of the solvents and diluents have tended to stiffen the market for these products here still further within the past week. Suppliers are wholly unable to handle all the business proffered them. Prices are firmly maintained throughout the list.

V. M. & P. Naphtha.—Buying interest on the part of the paint trade is reaching large proportions. The market tone is exceedingly strong in view of the growing shortage of supplies.

Lighter Fractions

Butane.—In increasingly active demand and light supply. Prices firmly held.

Heptane.—Continues in brisk request. Stocks somewhat reduced. Tone strong.

Hexanes.—Supply becoming tighter daily. Stocks light. Prices well maintained.

Octanes.—Buying interest growing. Supplies less than normal. Tone is strong.

Pentanes. — A steadily expanding movement is reported, with the result that stocks are being heavily drawn upon. Prices steady.

Propane.—A shortage is all that is preventing a much more extensive movement of this hydrocarbon into consuming channels, for consumers are clamoring for larger quantities, and suppliers are unable to accommodate all their demands. Prices strongly maintained.

Markets at Other Centers

Chicago—October 30

Butane.—Demand keen, market strong.
Heptane.—Inquiry good, prices holding.
Hexanes.—Call brisk, market steady.
Octanes.—Request active, prices firm.
Pentanes.—Much interest, quotations stiff.
Propane.—Active demand, market holding firm.

San Francisco—October 30

Even outside transportation difficulties, producing factors are faced with a serious problem in keeping the trade supplied. Demand running high.
Butane.—Takings are along brisk lines.
Propane.—A good buying movement is still note.

Tulsa—October 30

The market for virtually all the lighter hydrocarbons is exceedingly tight. Supplies are far below requirements and are being further reduced daily. Most buyers are seeking larger than normal quantities for uses directly or indirectly connected with war needs. Great difficulty is being experienced in obtaining adequate transportation facilities. Prices strongly maintained.

Butane.—Continues in active demand and scanty supply. Tone holds strong.

Propane.—With supplies greatly reduced and transportation facilities wholly inadequate for current needs, the market for this product is becoming stronger daily.

Petrolatums and Waxes

Paraffin.—Buying interest is keeping up well, being in excess of immediately available supplies in some lines, especially in numerous refined grades. Prices continue to be strongly maintained. Crude waxes are in moderate demand and more liberal supply than recently.

Petrolatum.—Refiners are in a quandary as to how to proceed in carrying out a contemplated price revision, in view of the necessity for turning from steel and other metal drums to fiber containers and wooden-stave barrels, for which they will have to make an additional charge. Most of them are hopeful that OPA will permit an upward adjustment of ceiling prices to

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Current prices on petroleum and its products are given in the alphabetical list of prices beginning on page 9

Petroleum, Wonder-Worker

A generation ago, London "Punch" gave vent to its enthusiasm over the wonderland of scientific discovery, which had then been opened up by the coaltar chemical industry, with a doggerel rime on the subject, which concluded: "You can make anything, from a toy to a star, with that stuff which we call 'dirty brown coaltar'." Today, the same could well be said of the gases of petroleum as well as those of coaltar.

It is difficult to conceive of anything less indicative of such wonderful results than crude petroleum, which, as it comes from the ground, looks about as promising as the drainings of a dirty crankcase. Yet this highly unattractive crude oil is productive of a continually increasing variety of chemicals of exceptionally high purity at constantly decreasing cost.

permit a passing-on of the costs of these containers to consumers, provided that they can show that a material impairment of reasonable profits would result from being compelled to adhere to the ceiling figures. The demand for all grades of petrolatum continues moderately active.

Amorphous Waxes.—A sizable buying interest continues to be reported for these waxes. Stocks are still light and prices strongly maintained.

White Mineral Oils.—In moderate demand, with the higher viscosities in especially good request. Prices firmly held at the levels reached in the recent downward readjustment.

Markets at Other Centers

Chicago—Oct. 30

Paraffin.—Good interest, prices firm.

Petrolatum.—Call remains good, market steady.

White Mineral Oil.—Moderate trade, quotations firm.

Los Angeles—Oct. 30

The single producer of paraffin wax here reports a continued active request for wax which is beyond his ability to meet. Situation very tight.

Fuels and Lubricants

Crude Petroleum.—Several moves have been taken this past week by government authorities to encourage amplification of production in the oil fields. In an effort to halt premature abandonment of wells in the Lima oil field of Northwestern Ohio and Northeastern Indiana, OPA has granted certain price adjustments on much of the crude oil produced in that field. The price of approximately three-quarters of the field's production has been increased 25 cents to a maximum figure of $1.50 per barrel. And OPC has authorized fairly close spacing patterns for oil wells drilled in Illinois and portions of Indiana and Kentucky.

Fuel Oil.—With consumption greatly curtailed by nationwide rationing, supplies are proving adequate for most requirements. Prices are being well maintained.

Gasoline.—There has been a notable increase in the output of natural gasoline, its production in August having averaged 227,000 barrels daily, a gain of 8,000 barrels over the July rate, according to the Bureau of Mines. Nationwide gasoline rationing is to go into effect November 22.

Kerosene.—A reduction of an eighth cent per gallon has been made in the price of 41-43 waterwhite at Gulf ports and an advance of the same amount has been announced in the price of the same grade in the Oklahoma-Texas area, making the revised quotations 3⅞c. to 4¼c. per gallon at Gulf ports and 4⅜c. to 4½c. in the Oklahoma-Texas region. Stocks are generally light and the demand brisk.

Markets at Other Centers

Chicago—October 30

Gasoline. — Offerings limited, prices firm.

Kerosene.—Good demand, no price change.

Lubricating Oil.—Call brisk, quotations steady.

Concentration Of Production

—Continued from page 7

is undesirable to bring new labor into towns where housing and community facilities—schools, water supplies, sewers, hospitals, etc.—cannot take care of more workers and their families coming from the outside.

Overcrowding, ill health, and inefficiency will result unless materials critical in the war effort are used to provide more housing and expand all the facilities that must go with it. Rather, we are seeking the advice and help of organized labor and government war agencies in arranging the effective transfer of workers released by closed plants to war industries with minimum hardship and dislocation. In selecting nucleus plants we must also prefer the plants whose operations minimize the burdens on the transportation and power systems and particularly on those parts of these systems that are already overloaded.

Selecting Nucleus Plants

By way of illustration of the operation of some of these considerations, I might cite the pulp and paper industry. In ordinary times the pulp and paper industry ships a great deal of pulp produced in the Pacific Northwest to the East for processing. This long continental haul of pulp and paper over heavily trafficked roads from the Pacific coast must be reduced as much as possible. In addition, the need for labor in war industries in the Pacific Northwest area is a growing consideration in the selection of nucleus plants. Labor in the woods can provide us with saw logs or pulp logs. For some of its labor the pulp and paper industry competes with shipbuilding and aircraft.

When there is conflict between various considerations affecting concentration, we must decide which are the narrowest bottlenecks and relieve them first. After consultation with those competent to advise on all these aspects of the problem, the War Production Board will decide upon the list of plants to be kept in production.

Each concentration plan must be designed with particular objective in mind and in the light of the peculiar nature of each industry. The problems arising from mere size and location of the 1,600 plants in the farm machinery and equipment industry are very different from those in the sugar refining industry where there are only two dozen plants. The concentration plans for the various industries must fall into many different patterns.

Manpower Problem

In this brief outline of the way the problem has emerged and the considerations which must be taken into account in determining concentration programs, I have mentioned only those things which are now clear. The magnitude of the task cannot be judged today because it depends on the events of the future. We already have a manpower problem, but unlike many other countries at war, we do not yet face an immediate and serious over-all manpower shortage.

Should such a shortage appear, we shall have to pay considerably more attention to the quantity of labor required for the production of a given quantity of product. Concentrated production, by keeping plants operating at a fairly high percentage of capacity, is more economical of labor than production carried on in more plants, each operating at a fairly low rate.

Even when a plant has been selected as one of those to continue turning out its customary product it cannot be protected from the vicissitudes of war any more than munitions plants. Materials shortages may occur. Labor and transportation shortages may spread and increase. But concentration of production will reduce the pressures on the firms continuing to make civilian-type products.

Furthermore, the War Production Board will make every possible effort to see that nucleus plants are able to produce what is required. The materials and labor necessary for essential production will be made available. But decisions as to what products and what quantities of each are essential will undoubtedly change. We shall probably find it necessary to follow concentration with further concentration in some industries. Some previously selected nucleus firms must then be closed. But we may also be compelled to reopen closed plants. We can plan ahead only as far as we can see.

Closed Plants

The concentration of production presents very serious problems as to the fate of the closed plants. The committee is deeply concerned with this problem, at the same time recognizing that it is part of a larger problem beyond the scope of the War Production Board. We have not yet found any satisfactory plan, but I will outline the problem as we see it.

If we close plants, we must decide what steps should be taken to insure that valuable productive resources shall not be allowed to disintegrate. But we cannot merely pension off everyone in a concentrated industry. We all know that there are plants and organizations in most industries which are not valuable enough to be preserved at any great cost. In these days their greatest value may lie in the scrap they can provide. Yet it is extremely difficult to make decisions in particular cases. There are also industries in which we would all agree that facilities should be converted as quickly as possible and play an active part in the war effort.

But there will remain facilities which, so far as we can see at present, cannot easily be diverted to war production. Yet they may be required later if we need increased output from the industry. The demand for the product of the industry for war purposes may increase, or we may find it necessary to increase our exports or our civilian supplies. Even if no increased demands are likely to appear, we must often preserve equipment to provide replacement parts for equipment in running plants or it may be necessary later to move machinery from closed to running plants.

In these ways we can keep to a minimum the demand for scarce materials to maintain production in concentrated industries. We may need buildings in which to store supplies, to house training programs, and for a number of other similar purposes. These problems are, of course, not peculiar to concentrated industries. There is much sentiment in favor of dealing with them in concentrated industries as part of the concentration plan. We are not yet in a position to say whether this is feasible or desireable.

Closed Firms to Be Paid

Related to this question but going beyond it is the question whether part of the receipts of the running firms should be turned over to the closed firms either for maintenance and upkeep or for other purposes. This problem is very perplexing. Any attempt to share the fortunes and misfortunes of firms within a concentrated industry leaves inequalities between different concentrated industries which, through the forces of circumstances beyond our control, are curtailed in different degrees.

Any attempt to deal with industries in which production is concentrated while leaving out those in which it is not concentrated gives rise to inevitable inequality between two groups. Financial losses in concentrated industries are intermingled with the broader financial repercussions of war. Wars call for a pattern of economic activity so different from that appropriate to peace that there must be heavy financial loss and profit. These losses and profits are scattered so widely as to make it extremely difficult to devise a plan which distributes fairly not only the direct but the indirect burdens of war.

The Committee on Concentration of Production is ready to consider such plans as may be advanced by a concentrated industry for compensating closed-down plants out of funds contributed by the nucleus plants. These proposals will be reviewed by a subcommittee including members representing the Treasury and Office of Price Administration. This committee is endeavoring to develop guiding principles in this field.

Preserving Brand Names

Plans for the concentration of the production of civilian-type goods also raise questions as to the extent to which we can preserve the goodwill of closed firms. In some industries goodwill is carried by a brand name; in others it is carried largely by a distributive organization. Here again it is far too soon to pretend to any final solution of the problem.

We have not yet discovered any basis for a general policy either to eliminate or retain private brand names. In some instances, particularly where an article has been standardized, even the industry itself may wish to eliminate brand names. In other cases, the concentrated industry may prefer that brand names be retained. In any event, the elimination of brands does not seem to be necessary for its own sake.

As for the distributive organizations of manufacturers, if firms whose plants are closed obtain a share of the goods produced by the nucleus plants, all firms have an opportunity to keep their goods before the public. It can be objected that, if all firms maintain distributive organizations, we fail to concentrate the distributive activities of manufacturers while we concentrate production. But concentration is justified only when directly or indirectly it contributes to the war effort. Workers now engaged in distribution may well be needed.

Distributive organizations in some industries carry the burden of repairing and maintaining goods already in the hands of consumers. This service is so obviously important in some industries, such as those that provide for the heating of homes, that it cannot be eliminated. Furthermore, the elimination of the distribution activities of firms whose plants are closed may leave some areas, at least temporarily, without supplies of needed goods. I think it is clear that there is no single rule that can be applied to all cases. Any decision in this matter, which I know is causing widespread concern, must depend partly on the service rendered by the distributive organization and partly on the extent to which any labor or other resources that might be freed by concentrating distributive industries are needed from time to time for the prosecution of the war.

Standardization of Goods

This concentration of production will probably often be accompanied by other measures in themselves necessary and by their nature affecting the operation of concentrated industries. The simplification and standardization of some civilian goods will be necessary to stretch our supplies of materials and sometimes our supplies of labor as far as possible. Where we cannot get along without the production of an article we can often get along for the period of the war with a similar though sometimes less satisfactory article. This simplification and standardization will often make it easier to concentrate production in fewer plants.

The limitation of new gas stove production to stripped models containing no more than 100 pounds of iron and steel per stove will save nearly 16,000 tons of iron and steel for the coming year, and will also serve to prevent nucleus plants from taking undue advantage of the concentration to market their normal competitive lines. Again if production is concentrated so as to minimize transportation, steps may be necessary to see that transport is in fact reduced to the minimum necessary amount, and that some of the potential gains from concentration are not dissipated by wasteful practice.

This program of concentration can take us very far. It is essential to the development of our full war potential. But we all recognize that it also takes us far away from some of the things we valued in our peacetime economic life. The fruits of past enterprise are threatened and some will be lost. We are departing from the spirit of the anti-trust laws and must keep in mind the possibility that monopolies will be fostered. While the preference for small plants for continued production is a partial safeguard, these aspects of the concentration policy should not be brushed aside.

But the choice before us is a choice between evils.

Fertilizer Materials

OPA Planning to Lift Price Ceilings on Substitutes for Chemical Nitrogen Products and Some Other Fertilizer Agents—Domestic Soda Nitrate Price Schedule Continued

Interest in the fertilizer industry has been focused this past week upon persistent reports that the War Production Board has pledged itself to make more liberal distributions of chemical nitrogen solutions, hitherto diverted almost entirely to direct war effort, among agricultural consumers, and that the Office of Price Control has agreed to lift price celings on organic nitrogenates, especially oilseed meals, which are now being resorted to in lieu of inorganic nitrates, and also on several other fertilizer materials, formerly carried from their points of origin to market by water routes, whose shipping has been made much more expensive by necessary recourse to rail transportation, since war conditions have precluded continuance of their erstwhile modes of conveyance.

It is now understood that WPB is acquiescing in the plans prepared by the Fertilizer Industry Advisory Committee, representing leading fertilizer interests, for distributing among farmers the recently approved fertilizer compounds or "grades," containing balanced units of nitrogen, phosphorus and potash, on a basis of the established requirements of the various crops and the amounts of these mixed fertilizers consumed for this purpose in recent years. It is also known that the Department of Agriculture is now engaged in designating certain crops as "vital or essential war crops," to which preference is to be given hereafter in allotting fertilizer materials, and that WPB has already approved the distribution of a special formula compound consisting of three units of nitrogen (one-half a unit in the form of inorganic and two and a half units in the form of organic nitrogen), together with eight units of phosphoric acid and seven units of potash, for use in the operation of so-called "victory gardens."

Domestic producers of synthetic nitrate of soda have announced extension of their October price schedule for November. And the importers of natural nitrates from Chile are counted upon to take similar action with regard to their prices for the current month.

Price revisions within the past week have been noted in sharp markups in cottonseed meal and peanut meal, resulting from a greatly amplified demand for these vegetable organic ammoniates and difficulty in satisfying it.

Nitrogenates

Castor Pomace.—Additional arrivals of castor beans from Brazil have failed to relieve the shortage of pomace or meal, as pressing operations are still confined to rather small proportions. While one big producer has reopened and is now operating two recently closed plants in the local area, another is planning to suspend operations for a two-week interval within the near future. Prices continue strongly maintained. Latest arrivals of beans have aggregated 35,164 bags.

Cottonseed Meal.—In response to a hugely increased demand for this organic ammoniate, its price has been marked up for November delivery to the extent of $1.70 per ton at Memphis and Southeast mills to a basis of $37. For December delivery it has been advanced $2.40 to $38 per ton. Besides having to compete with the feed manufacturers, who can better afford to pay these relatively high prices, the fertilizer trade is experiencing great difficulty in arranging shipments of this meal, because of the inadequacy of transportation facilities. Present prices are far above the "floors" established by the Department of Agriculture, CCC and OPA, which were to begin at $35 and run up to $36.50 next February.

Cyanamid.—More liberal offerings of this air-fixation product are being made to fertilizer interests, although the bulk of the output is still being taken up for war ammunition in Canada and the United States. Prices continue strongly held.

Dried Blood. — Packers are still withholding the greater part of their output for their own uses. There is a good demand from feed makers, however, and some sales are being made to them on the newly established basis of $4.95 for 16-16½ percent ammonia in bags in the local market.

Fish Meal.—Fish factories in Chesapeake Bay are having trouble accumulating enough menhaden scrap to fill contracts already on their books and are in poor position to make any offerings. Fishing off the capes is reported fair, but the combined menhaden catch off the Atlantic coast and bays for the entire season is unquestionably short, although the supply of fish oil has been brought up to normal proportions by extensive catches of sardines off the Pacific coast. New England and Pacific coast consumers will benefit somewhat by the recently issued OPA regulation affecting Canadian fishmeal, but this order will not affect consumers on the Atlantic coast south of New England or inland. No meal has yet been made by domestic grinders from new catch menhaden scrap because of their disgruntlement over the OPA differential over the base price.

Linseed Meal.—An active demand continues for this meal, but purchases by fertilizer interests are held down to meager size by its high cost. A leading producer has withdrawn from the market, but a nominal price of $36 per ton is still being quoted for November-January deliveries in the New York area.

Nitrate of Soda.—Manufacturers of the domestic synthetic product have announced continuance of their October price schedule for November. Although the Chilean nitrate interests have not yet made public their prices for the current month, it is expected that they will likewise extend their October figures. Selling entirely on allocations, little of this nitrate is now reaching mixers of complete fertilizers, as the war industries are still securing the lion's share.

Nitrogenous Material.—Some of this material continues to move into consuming channels in the South from Chemical, Illinois, on old contracts, but no new offerings are being made from that point of production or any other. The material going south from Chemical, Ill., is on an allocated basis at $2.90 per unit-ton for November-December shipments.

Peanut Meal. — In keen request. Prices have been advanced 90 cents to $36 per ton at Southern Alabama-Georgia producing points.

Soybean Meal.—A leading producer has withdrawn from the market, after selling its entire output of 44 percent meal up to next September and its 41 percent grade up to next April. There is now a marked scarcity of this meal. A merely nominal quotation of $30.25 per ton is being made at Decatur, Ill., which makes an equally nominal quotation of $38.25 in New York, but there is no new crop meal here. A resale of a relatively small lot in New England has recently been made at $34 per ton, Decatur, equivalent to approximately $42 per ton in the New York area.

Sulphate of Ammonia. — Fertilizer interests have not yet benefited to any notable degree by WPB's recent promise of an adjustment of allocations so as to permit more of this ammoniate to go into fertilizer compounds. Prices continue strongly maintained at the plants and ports bases fixed in the OPA regulation's ceiling figures. Estimates on operation of by-product cokeovens for week ended October 24 indicate a production of 38,021,120 pounds from this source. Production for September is reported by the Bureau of Mines to have aggregated 125,884,287 pounds, while sales for that month are shown to have totaled 132,592,790 pounds, leaving stocks at the end of that month at 109,245,268 pounds.

In Spain, additional current and potential production is reaching fairly large figures. A by-product recovery plant, being erected at iron works at Bilbao, is counted upon to produce 125,000 tons, while another plant is contemplated for construction at Sagunt, to yield 60,000 tons. Besides these sources of production, two new synthetic plants are planned in Spain and the combined output of all these, together with present production, is expected to produce a total of 175,000 tons of nitrogen yearly in that country. In Portugal, the government has agreed to admit, duty free, equipment for turning out a sizable amount of sulphate of ammonia on condition that Portuguese manufacturers fail to supply the needed equipment within a very limited time. To date, however, it is noteworthy that supplies of any and all kinds of chemical fertilizers have been difficult to obtain in that country.

Tankage.—With feed manufacturers constituting the only sizable buyers of this animal organic, the fertilizer trade continues shut out of the market. Prices are still firmly held at the levels established in the recent OPA regulation.

Potashes

Leading domestic producers report having sold their entire output of muriate and manure salts through next March. Hence offerings of these salts continue meager, although there is

Price Changes

Advanced

Cottonseed meal, 8 percent, Memphis and Southeast mills, $1.70 to $2.40 per ton.

Peanut meal, 8.75 percent, at Southern Alabama-Georgia points, 90c. per ton.

Reduced

None

Comparative Values

Index numbers compiled from four typical fertilizer materials on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
71.8	71.8	71.8	70.6

Market news that may have developed after this report was sent to press will be found on page 4.

What Fertilizing Does For Farmers

Thanks chiefly to plentiful but judicious employment of fertilizer materials and the ballooning demand for farm products created by the exigencies of the war, these are halcyon days for the American farmer.

Even with smaller than usual acreages planted to cotton and some other crops, the aggregate production of the farmlands in the United States for 1942 has attained record-breaking proportions—28 percent above the pre-draught average of the 1923-1932 period, comared with previous peaks of 12.6 percent for 1937 and 11 percent for 1941. For the yield per acre of all our crops has been approximately 36 percent above this pre-draught average, compared with the other outstanding favorable years, 1937, 1940 and 1941, which ranged from 17.7 percent to 20.7 percent above the base period of 1923-1932.

With the demand for farm products swelled to unprecedented size by greatly increased consumer purchasing power, and hugely amplified military and lend-lease requirements, our farmers have had no need to seek markets for their crops this year. Most crops have been sold before they were harvested. And the farmers are now assured of a still more clamorous call for their products within the ensuing year. Prices received by the farmers, this year, have averaged 25 to 30 percent above those for last year. Their net income for 1942 has been about 139 percent of parity—the level needed to maintain the 1910-1914 ratio of per capita farm income to per capita non-farm income—running well over fifteen billion dollars.

FERTILIZER MATERIALS
— Inquiries Solicited —
FRANK R. JACKLE
495 Lexington Ave., New York
Telephone: MU-9-5188
Cable Address: "JACKLECO"

Domestic SULPHATE of AMMONIA AND AMMONIA LIQUOR
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•
TEXAS GULF SULPHUR COMPANY
(INCORPORATED)
75 East 45th St., New York City
Deposits and Plants: Newgulf and Long Point, Texas

Current prices on fertilizer materials are given in the alphabetical list of prices beginning on page 9

still some sulphate available. A still more severe shortage of fertilizer salts is now looked for in consequence of the recent stripping of the market by fertilizer mixers who have turned to these salts on a larger scale than usual, because of their inability to meet their requirements in nitrates.

Phosphates

Bone Materials.—In the absence of material from South America there is a growing scarcity of domestic bone, both raw and steamed. The market continues strong with prices well maintained.

Cottonseed Hull Ash.—Suppliers of tobacco growers in the North are eagerly seeking to fill their requirements. Prices continue firmly held.

Phosphate Rock.—As a sequel or supplement to its Maximum Price Regulation No. 240, OPA is understood to be considering an upward revision of prices for Florida land pebble, in order to compensate for the higher cost of transporting this phosphate rock from points of origin and hauling from mining operations to crushing and refining plants, which have recently placed this material at a disadvantage marketwise with Tennessee brown phosphate rock. A fair buying interest is shown in both Florida land pebble and Tennessee brown phosphate rock at the recently revised price levels. Supplies, however, continue ample.

Superphosphate. — Reallocation of much triple superphosphate produced in Florida, and already under contract to domestic consumers, to the British government in England is now under way, amounting nearly to commandeering of the bulk of the output of this product in Florida. The producers are taking this action philosophically, without a word of complaint, but it is causing much inconvenience to American consumers who had placed their orders well ahead to assure uninterrupted deliveries. There is a moderate demand for all descriptions of superphosphate but, besides the shipment of large quantities of triple superphosphate on lend-lease arrangements to England, difficulties are being experienced in moving any and all grades because of the insufficiency of rail shipping accommodations and an almost complete cutoff of water transportation facilities.

Sulphur and Pyrites

Crude sulphur continues to move in unabated fashion from the mines in Texas to consuming centers throughout the United States. OPA is now arranging an upward revision of price to make up for the increased cost of shipping this material by rail. Prices are well maintained. Spanish pyrites continues unavailable. Production of sulphur in the United States is shown by the Bureau of Mines to have increased 25 percent in the first eight months of this year over the output for the corresponding period of last year. Shipments of this chemical from mines have increased 9 percent in this eight-month interval and producers' stocks at the mines, in transit and in warehouses have been built up from 4,685,843 long tons, on January 1 to 4,927,673 tons on August 31, showing a gain for that period of 5 percent.

Markets at Other Centers

Atlanta—October 30

Superphosphate.—61 cents per unit, interior producing points.

Nitrate of Soda.—$30 per ton, bulk ports when available.

Sulphate of Ammonia.—$29 per ton, ports; $28 ovens. Scarce.

Cottonseed Meal.—8 percent meal, $37 to $38 per ton, southeastern points.

Peanut Meal.—$36 per ton, Georgia-Alabama points.

Baltimore—October 30

Fish Scrap.—Operations of the menhaden fishing fleet in Northern waters have come to a stop, and off North Carolina the activity is limited, so that additions to scrap this past week have been insignificant. The fishing companies, virtually without exception, are short in their deliveries of this ammoniate, with no expectation of catching up, so that the volume of business must be regarded as under commitments by a rather large percentage. There is no buying for the reason that none of the material is being offered, though the ceiling is still in effect. This ceiling varies with the percentage of protein disclosed by the analysis. Fishing in Florida is suspended.

Nitrogen Consumption by States

The following statistics on consumption of nitrogen in the United States in 1941 were given in *The Fertilizer Review*, published by the National Fertilizer Association, in an article written by A. L. Mehring. This article was credited with being a contribution from the Division of Soil and Fertilizer Investigations, Bureau of Plant Industry, and the Chemicals Division, Office of Agricultural War Relations, U. S. Department of Agriculture:—

	Short tons N— In mixed fertilizers			In materials sold directly to farmers			
State or territory	Water soluble nitrogen	Insoluble nitrogen	Total nitrogen	Water soluble nitrogen	Insoluble nitrogen	Total nitrogen	In all fertilizers
Alabama	11,932	3,370	15,302	20,243	571	20,814	36,116
Arizona	92	41	133	554	10	564	697
Arkansas*	2,188	262	2,450	6,378	154	6,532	8,982
California	4,893	1,971	6,864	30,968	1,091	32,059	38,923
Colorado	76	6	82	83	4	87	169
Connecticut	1,502	353	1,855	432	1,177	1,609	3,464
Delaware	999	150	1,149	106	6	112	1,261
District of Columbia	40	8	48	22	12	34	82
Florida	16,601	6,866	23,467	6,374	1,155	7,529	30,996
Georgia	15,180	3,685	18,865	23,771	1,035	24,806	43,661
Hawaii	5,880	120	6,000	11,214	.....	11,214	17,214
Illinois	903	130	1,033	1,110	64	1,174	2,207
Indiana	3,123	443	3,566	1,403	71	1,474	5,040
Iowa	203	30	233	30	27	57	290
Kansas	86	14	100	37	1	38	138
Kentucky	1,864	178	2,042	356	10	366	2,408
Louisiana*	3,342	348	3,690	9,105	167	9,272	12,963
Maine	7,108	735	7,843	191	19	210	8,053
Maryland	3,796	765	4,561	1,211	106	1,317	5,878
Massachusetts	2,186	393	2,579	910	247	1,157	3,736
Michigan	2,950	432	3,382	1,221	34	1,255	4,637
Minnesota	290	35	325	96	61	157	482
Mississippi*	4,906	1,041	5,947	31,201	393	31,594	37,541
Missouri	761	139	900	143	71	214	1,114
New Hampshire	470	65	535	50	29	79	614
New Jersey	6,461	940	7,401	1,183	172	1,355	8,756
New York	8,614	1,339	9,953	2,631	292	2,923	12,876
North Carolina*	21,724	6,053	27,777	19,591	2,804	22,395	50,172
Ohio	6,845	772	7,617	2,153	272	2,425	10,042
Oklahoma	199	24	223	54	25	79	302
Oregon	372	165	537	1,121	37	1,158	1,695
Pennsylvania	6,444	1,066	7,510	633	206	839	8,349
Puerto Rico	10,230	220	10,450	7,617	.....	7,617	18,067
Rhode Island	382	54	436	89	25	114	550
South Carolina	12,635	3,012	15,647	23,304	2,275	25,579	41,226
Tennessee	1,830	235	2,065	2,411	93	2,504	4,569
Texas*	4,366	592	4,868	1,989	686	2,675	7,543
Vermont	470	38	508	187	18	205	713
Virginia	9,300	1,890	11,190	7,898	686	8,584	19,774
Washington	300	150	450	1,227	44	1,271	1,721
West Virginia	840	210	1,050	254	22	276	1,326
Wisconsin	1,209	154	1,363	220	138	358	1,721
All others	64	7	71	12	1	13	84
United States	183,657	38,411	222,068	219,837	14,257	234,094	456,162
Continental U. S. only	167,547	38,071	205,618	201,006	14,257	215,263	420,881

* Year ended June 30, 1941.

Chicago—October 30

Blood.—Principal grade, unground, $5.38 per unit of ammonia.

Tankage.—Unground, feeding grade, $5.53 per unit; hoof meal, $4.25 to $4.50; liquid stick, $2 to $2.25.

Bone Materials. — Ground, steamed bone, 3 and 50 percent, $35 to $36; cattle jaws, skulls and knuckles, $40 to $42 per ton; dry rendered tankage, hard pressed, $1.20 to $1.21 per unit of protein; 50 percent meat and bone scrap, $68 per ton.

San Francisco—October 30

Ammonia Phosphate.—Quoted at $48 per ton for 16/20 grade, delivered inland points.

Ammonia Sulphate.—Sold subject to WPB allocation at $38 per ton; freight allowance up to $4.40 per ton.

Blood Meal.—Very light offerings feature the market, with supplies being closely bid for. Named at $4.40 to $5 per unit, f.o.b. Los Angeles.

Bone Meal.—Steamed bone meal quoted at $47.50 per ton, f.o.b. San Francisco. Low-grade raw, upwards of $37 per ton, f.o.b. plant, San Francisco.

Fish Meal.—Production currently is very light, which is discouraging offerings. Anything put on the market at the ceiling of $1.16 per unit is being quickly absorbed.

— OPD : 72d Year —

Blaw-Knox Gets Detinning Drums Order

Blaw-Knox Company, Pittsburgh, has been awarded a contract amounting to approximately $1,000,000, by the H. K. Ferguson Company, for the design and fabrication of fourteen new type detinning drums for use in salvaging tin from cans. This contract represents a part of that awarded recently to the Ferguson Company by the Defense Plant Corporation for six detinning plants for salvaging cans.

The drums will be cylindrical in design, each with a diameter of 20 feet and a length of 28 feet. Shredded tin cans will be fed into one end of the drum and, after passing through a chemical solution which is kept in motion by rotation of the drum, will emerge at the other end completely detinned.

— OPD : 72d Year —

European Chemists Society To Meet November 5

The Mutual Aid Society of European Chemists and Pharmacists will hold a meeting on the first and third Thursday of each month in the 302 West Ninety-first street, this city, at 8:30 p.m. each meeting there will be a lecture by well known chemists. Dr. Ludwig Adler at the November 5 meeting will speak on "The Signification of the Hormons."

Non-Metallic Transportation Advisory Group Formed

OPD Washington Bureau

The Non-Metallic Minerals Transportation Industry Advisory Committee has been formed by the War Production Board. R. J. Lund, chief of the Miscellaneous Minerals Branch, is the government presiding officer. Committee members are:—

Marion Brande, Calcium Carbonate Company, Chicago.

Richard B. Carothers, H. C. Spinks Clay Company, Newport, Ky.

R. H. Frei, American Colloid Company, Chicago.

Donald Hagar, Consulting Caramic Engr., W. H. Loomis Talc Company, Zanesville, Ohio.

R. J. Newberry, Johns-Manville Corporation, New York.

W. Wallace Roff, Southern California Minerals Corporation, New York.

Robert F. Sherwood, vice-president United Feldspar & Milling Corporation, New York.

Thomas C. Matthews, vice-president, Pennsylvania Glass & Sand Corporation, Lewistown, Pa.

— OPD : 72d Year —

Maas Chemical Issues Booklet on Products

A. R. Maas Chemical Company has just issued a comprehensive booklet describing its products, as to formula, grades and analysis, as well as telling the type of container used in shipping and the potential actual principal uses for the products. Among the products listed in are soda sulphite and hyposulphite, phosphoric acid, soda phosphates and photographic chemicals in general. Copies of this booklet are available by writing the company at 4570 Ardine street, South Gate, Calif.

— OPD : 72d Year —

Copper Seized by WPB

OPD Washington Bureau

The first requisitioning order to become necessary under the War Production Board's copper recovery program has been served by the Office of the U. S. Marshal in Topeka, Kans., on the Sunshine Mantle Company, Chanute, Kansas. Approximately 140,000 pounds of copper products were seized by the Government for use in war industries. The Sunshine Mantle Company had refused to sell its copper inventories to the government, although it was prohibited from making use of them by WPB orders restricting this scarce material to essential uses.

Molybdenite Deposit Discovered in Canada

OPD Washington Bureau

The opening up of a large, newly-discovered deposit of molybdenite in Canada was announced at a recent meeting of officials of the Combined Raw Materials Board and the Materials Coordinating Committee of the United States and Canada.

The deposit was located about 400 miles northwest of the city of Quebec in Preissac Township, Que., by a leading Canadian mining concern. Drilling so far indicates that the deposit is at least 400 feet long and 200 feet deep and averages 30 feet wide. It may be bigger because drilling has not yet determined the limits at both ends and in depth.

— OPD : 72d Year —

American Standards Ass'n Issues Revised List

The American Standards Association has announced the publication of a newest list of American standards for 1942. More than 550 American standards are listed, of which seventy-one represent new and revised standards approved since the last issue of the list in February, 1942.

This list will be sent free of charge to anyone. Requests should be addressed to the American Standards Association, 29 West Thirty-ninth street, New York, N. Y.

— OPD : 72d Year —

General Dry Battery To Open Calif. Plant

A magnetic separator plant will be constructed immediately for the General Dry Battery Company at the property of the Western Manganese Company, five miles from Patterson, Calif. A Baltimore plant operated by General Dry Battery is being dismantled for shipment to the mill site at Patterson. It is estimated the project will cost $100,000.

— OPD : 72d Year —

Steel Barrel Output Off

Production of heavy steel barrels and drums in August, 1942 was 1,536,218, compared with 1,760,035 for July, 1942, and 1,589,848 for August last year, according to the Bureau of Census. Shipments were 1,537,655 for August, 1942, as against 1,760,275 for July, 1942 and 9,789,926 for August last year. Stocks at the end of the month totaled 40,476. Output of light type steel barrels and drums in August, 1942, reached 377,286 compared with 363,622 last year. Shipments were 358,475 for August, 1942, compared with 485,597, for July, 1942, 368,616 for August last year. While unfilled orders at the end of the month were 560,850 for August compared with 574,840 in July and 170,003 in August last year.

— OPD : 72d Year —

Texas to Illinois Pipeline Is Half-Way Completed

OPD Washington Bureau

Passing of the half-way mark in the job of laying the 531-mile war emergency oil pipeline from Longview, Tex. to Norris City, Ill., has been announced by Petroleum Coordinator for War Harold L. Ickes. By October 16, the Coordinator said, construction crews had welded and laid 289 miles of 24-inch pipe, and were well on the way to assuring completion of the line early in December. Start of oil deliveries through the "big inch" is scheduled for about January 1, provided power connections can be completed by that time, and deliveries of certain critical materials are made on schedule. The line is being constructed at government expense and is designed to make an additional supply of oil available in Southern Illinois for trans-shipment to the East coast shortage area by railroad tank-car and river barge. It will have a daily delivery capacity of 300,000 barrels of crude or heating oils.

— OPD : 72d Year —

Skelly Adds to Directorate

Skelly Oil Company, Tulsa, Okla., at its annual meeting last week elected Thomas A. J. Dockweller, a Los Angeles attorney, a director to succeed Harold L. Rowland, who had resigned. James W. Vaiden, vice-president in charge of manufacturing, was elected an additional member of the board. Other directors were re-elected.

Scientific and Professional Services

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Alcohol Hexahydric:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Aluminum Hydrate:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Aluminum Leaf:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Bronze Blue:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Bleaching Powder:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Bronze Leaf:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Brushes for Cleaning Type:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Carbon Black:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Carbon Tetrachloride:—400 gallons; General Purchasing Officer, the Panama Canal, Washington; schedule 6624, openings November 3.

Castor Oil:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Chlorinated Diphenyl:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Citric Acid:—Chief, Purchase Branch, Agricultural Marketing Administration, Department of Agriculture, Washington; announcement FSC 1027, openings November 16.

Ethyl Acetate:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Ferric Chloride:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Fuel Oil:—Director of Procurement, Procurement Division, Treasury Department, Washington; procurement number FO-5-3-43, openings November 3, 1942.

Gasoline:—Director of Procurement, Procurement Division, Treasury Department, Washington; Procurement number G-5-3-43, openings November 7, 1942.

Gasoline:—Director of Procurement, Procurement Division, Treasury Department, Washington, Procurement number G-6-3-42, openings November 7, 1942.

Gasoline:—Director of Procurement, Procurement Division, Treasury Department, Washington; Procurement number G-4-3-43, openings November 5, 1942.

Glue:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Glue Brushes:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Glycerin:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Glyceryl Phthalate Enamel:—500 gallons; General Purchasing Officer, the Panama Canal, Washington; schedule 6625, openings November 4.

Gold Leaf:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Graphite:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Grease, Mineral Cup:—Purchasing Agent, Post Office Department, Washington; Federal specification VV-G-681; invitation 1128, openings November 4.

Gum Arabic:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Lacquer:—25 gallons, Chief Procurement Officer, Air Depot, APO No. 825, c-o Postmaster, New Orleans; Procurement number 43-455, openings November 6, 1942.

Lanolin:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Magnesium Carbonate:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Milon Green:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Mineral Oil:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Nickel Salts:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Nicotinic Acid:—336 pounds, Chief, Purchase Branch, Agricultural Marketing Administration, Department of Agriculture, Washington; announcement FSC 1029, openings November 9.

Ozokerite Wax:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Pyrodoxine Hydrochloride: — 350 grams, Chief, Purchase Branch, Agricultural Marketing Administration, Department of Agriculture, Washington; announcement FSC 1026, openings November 9.

Soda Caustic:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Soda Phosphate:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Soda Sesquisilicate:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Titanium Dioxide:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Toning Blue:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Turpentine:—3,000 gallons; General Purchasing Officer, the Panama Canal, Washington; schedule 6625, openings November 4.

Turpentine:—60 gallons, Chief, Procurement Division, United States Veterans Administration, Arlington Building, Washington; Procurement number 79, openings November 6, 1942.

Varnish, Lithographic:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Varnish, Rosin Oil:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Violet Toner:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

Zinc:—Office of the Public Printer, Government Printing Office, Washington; openings November 9.

- - - —V- - -

Paint Pigments Advisory Group Formed by WPB

OPD Washington Bureau

Appointment of an advisory committee for the chemical and organic pigments industry was announced October 24 by the War Production Board. E. H. Bucy, chief of the protective coatings section of the WPB, is the government presiding officer. Members of the committee are:—

G. A. McCorkle, E. I. du Pont de Nemours & Co., Wilimington, Del.; B. M. Van Cleve, Sherwin-Williams Company, New York; Arthur F. Brown, Imperial Paper & Color Company, Glens Falls, N. Y.; J. D. Todd, Kentucky Color & Chemical Company, Louisville, Ky.; John Allegaert, United Color & Pigment Company, Newark, N. J.; R. M. Reed, jr., Western Dry Color Company, Chicago; G. W. Nieder, Milton-Davis Chemical Company, Cincinnati, Ohio; Vincent C. Vesce, Harmon Color Works, Paterson, N. J.; Lyle E. Squire, Standard Ultramarine Company, Huntington, W. Va.; E. J. Hildebrand, A. Wilhelm Company, Reading, Pa.; Thomas P. Brown, Reichhold Chemicals, Inc., Brooklyn, N. Y.

See Page 34

FMC

EQUIPMENT YOU SHOULD RELEASE!

In judging the disposal of idle machinery, the WPB suggest that if you have not used a machine for three months and if you do not foresee a use for it in the coming three months, it should be sold for utilization elsewhere or sent to the scrap pile destined for our steel mills.

We repeat for the 'umpteenth time, that hundreds of units are rusting away . . . many of them urgently needed by War Work plants. Check your surplus very carefully with the above thought in mind. We can reallocate your unneeded machines where they will do the most good.

The following list comprises not only our current offerings but will also serve you as a guide for machinery WANTED, as well.

HEAVY DUTY MIXERS
standard makes

2—W.&P. 9 gal. Jacketed and Unjacketed, Class BB size LL.
1—W.&P. 75 gal. Unjacketed Double Arm, Size 14BB.
1—W.&P. 100 gal. Vac. Jacketed, Size 15.
1—W.&P. 200 gal. Unjacketed, Size 17 X BB.
1—J. H. Day 100 gal. Mogul Mixer.
3—Day and Read 100 gal. Dough Mixers.
1—Abbe Mastedon 200 gal. Jacketed Mixer.
1—Day Jumbo 450 gals. Jacketed Mixer.
1—Howes 3,000 lb. Dry Mixer with loader and motor.
6—Dry Powder Mixers 800 lb. to 1,100 lb.
6—Dry Powder Mixers 1,100 lb. to 1,500 lb.
7—Dry Powder Mixers from 50 lb. to 200 lb.
Steel Storage Tanks up to 20,000 gal.
3—Copper St. Jacketed Kettles 250-300-gal. (others).
12—Steel Jacketed Kettles 1,200 gal. with agitators.
7—Lined Pebble Mills, 800 gal. capacity.
2—Abbe Smidth Tube Mills 4'6"x 18'9½".
1—Ball Mill continuous, steel, 5'x8'.
1—Hardinge Mill 8'x22'.
1—Allis Chalmers Dry Mill 4'6"x20' with balls.
2—Pfaudler 6' Glass Lined Jacketed Agitated Vac. Pans.
1—ALUMINUM VACUUM STILL 5'x10' with aluminum coils.
1—Copper Calandria Vacuum Pan 10' diameter.
8—Horizontal Vac. Dryers 7'x60'.
2—Devine Rotary Vacuum Dryers 7'x60'.
1—SWEETLAND FILTER NO. 10.
1—Oliver Filter 3'x8".
1—Shriver 42", 38 Chamber Filter Press.
1—Sperry 42", 57 plate Filter Press.
1—Sperry 24", 19 plate Filter Press.
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5—Rubber Lined Tanks
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2—1,000 Gallon Soap Kettles
5—Copper Steam Jacketed Mixing Kettles, 50 to 350 Gallons
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5' dia. x 14', insulated and covered with aluminum, 1,980 gallons.

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10' dia. x 19', made of 5/16 plate, capacity 10,602 gals. each.

8 TANKS
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4—100 gallon WERNER & PFLEIDERER mixers
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—*Continued on page* 91

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1—10' dia. x 40" face REVOLVING DRYER.
7—ROTARY VACUUM DRYERS: 1-Buffalo 5' x 30"; 5-Devine 4' x 25'; 1-Devine 4' x 30'.
4—ATMOSPHERIC DRUM DRYERS: 1-4' x 12' dbl. drum; 2-Anco 4' x 9' single drum; 1-4' x 8'.
17—RUBBER LINED Rectangular TANKS: 1-2200 gal., 2-1000 gal., 2-650 gal., 9-500 gal., 2-200 gal., 1-150 gal.
60—25 gal. MONEL open TANKS; 12-45 gal.
1—20 gal. MONEL KETTLE electrically heated.
1—50 gal. STAINLESS STEEL LINED jacketed KETTLE.
1—100 gal. ALUMINUM JACK KETTLE, 2-80 gal., 1-60 gal., 2-40 gal., 1-20 gal.
4—300 gal. PFAUDLER WATER JACKETED KETTLES, side m.d. agitators; 1-125 gal.
10—300 gal. COPPER CLOSED TIN-COATED TANKS.
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8—PEBBLE MILLS: 1-Patterson, 6' x 7' Silex Lined; 1-32" x 42" rubber lined; other sizes.
1—Stokes 79-80 Combination TUBE FILLER, CLOSER Clipless Closure, m.d.
6—3 ROLLER MILLS, up to 16 x 40.
8—1000 lbs., 800 lbs., 600 lbs., DRY POWDER MIXERS, other sizes.
2—W. & P. MIXERS, size 21-X-BB, jacketed, 625 gallons; 1-size 15,100 gal. jack.; 1-size 14,50 gal. jack.; other sizes.
4—4' x 6' Iron OLIVER CONTINUOUS FILTERS.
1—Pneumatic Scale PACKAGING UNIT.

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1—14' dia. WEDGE FURNACE, 7-hearth complete.
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2—Cresson Morris 48" Copper basket CENTRIFUGALS, ball bearing, direct m.d.
2—Shriver 42" x 42" cast iron FILTER PRESSES, 40-chambers, plate and frame.
4—Worthington Duplex piston, bronze fitted PUMPS, 2-6" x 12" Magna, belt driven, 1-7" x 12" and 1-6" x 12", motor driven by 7½ HP, AC motors.
1—Hoepner 10 lbs. to 25 lbs. automatic SCALE and Filled BAG SEWER, motor driven.

1—Buffalo 17-shelf VACUUM SHELF DRYER, 42" x 42" shelves.
1—Sperry 42" x 42" CAST IRON FILTER PRESS, plate-frame, 55 chambers; 1-Shriver 36" x 36", washing, 60 chambers; 20 others, 30" x 30" to Laboratory sizes.
11—HEAT EXCHANGERS, Ahlberger; 50, 100, 300, 440 sq. ft. heating surface; also smaller sizes.
5—RAYMOND PULVERIZERS: 5 Roll High Side; No. 1 Beater Type; No. 0000.
3—Vilter AMMONIA COMPRESSORS, twin horiz., 250 tons each, direct motor driven to West. 500 HP synchr. Motors, 3-60-440 V.
1—Vilter AMMONIA COMPRESSOR, 40 tons, motor driven with West. 100 HP 3-60-440 V.
2—Direct Heat Rotary DRYERS: 1-6' x 24' Iroquois and 1-5' x 30' Iroquois, ½" shells.
2—All Copper EVAPORATORS: 1-Badger triple 450 sq. ft. per effect, complete; 1-Standard triple 350 sq. ft. per effect, complete.

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Business Wants and Offers

—*Continued from page 90*

Positions Wanted

MANAGER, thorough experience buying and selling chemicals, pharmaceuticals, raw materials for the industry, domestic, import, export, desires change to manufacturing organization. Presently employed. Draft exempt. Best references. BOX 119, Oil, Paint and Drug Reporter.

EXECUTIVE, thoroughly experienced handling raw materials, industrial chemicals, oils, solvents, dyestuff, pharmaceuticals, etc.; recent selling contacts with U. S. Government, private war industries, foreign allied government buying agencies; open for position. BOX 121, Oil, Paint and Drug Reporter.

Processes Offered

EMETINE HYDROCHLORIDE, U.S.P., complete proven process presently available by reason necessary changes in manufacturing activities. Material produced under this process now being supplied U. S. War Department and well-known chemical houses. BOX 126, Oil, Paint and Drug Reporter.

New Orleans Paint Club Officers Installed

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For Sale

1—STRUTHERS WELLS VERTICAL STEEL TUBE EVAPORATOR, SINGLE EFFECT, HAVING 3300 SQ. FT. HEATING SURFACE.
2—Four Pass Heaters, 24"x12'.
4—Single Pass Heaters, 12"x8'.
8—Redwood Tanks, 16'x12'.
1—Stephens-Adamson 4" Tubular Conveyor.
1—ROTARY DRYER, 6'x70'.
4—ROTARY DRYERS, 4'x40', 4'x30', 3'x20', 3'x18'.
1—Shriver 24"x24" Steam Jacketed Filter Press, plate and frame, 30 chambers.
8—Rubber Lined Pebble Mills, 24"x36", 36"x36".
3—Jeffrey Hammer Mills, 18"x24", 24"x36", 36"x18".
17—Lead Valves, 2".
3—Tolhurst 32" Centrifugals, motor driven.
3—Roller Mills, 9"x24", 12"x32".
2—Day 5"x12" Roller Mills.
6—Pony Mixers, 8, 15, 20, 40, 80 gals.
2—Mikro Pulverizers, 12", 24".
2—Steel Storage Tanks, 20'x20'.
3—PROCTOR AND SCHWARTZ TRAY DRYERS, 4'x6'x7' HIGH.
3—Cast Iron Plate and Frame Filter Presses, 36"x36".
1—Hersey 5'x25' Indirect Heat Dryer.
2—Rubber Lined Tanks, 42"x60".
1—Stainless Steel Jacketed Tank, 46"x30".
1—Rotary Continuous Filter, 6'x4'4".
2—Williams Infant Hammer Mills.
1—Jacketed Pebble Mill, 24"x30".
3—Atmospheric Drum Dryers, 4'x8', Double Drum 28"x60", 36"x96".
1—Cutler No. 4 Steam Tube Dryer.
2—Jaw Crushers, 6"x9", 9"x15".
23—Storage Tanks, from 5,000 to 50,000 gals.
1—Raymond No. 1 Pulverizer, motor driven.
1—Day Imperial No. 30 Mixer, jacketed.
1—Day Cincinnatus 112 gal. Mixer, heavy duty, motor driven.
4—Rotex Screens, 20"x40" to 40"x84", single, double and triple deck.
14—Pebble Mills, Lab., to 600 gals.
6—Sharples No. 6 Clarifiers.
5—Tolhurst Centrifugals, 26" to 60".
22—Batch Mixers, 50 to 2,000 lbs.
26—Copper Jacketed Kettles, 10 to 300 gals.
4—Sweetland Filters, Nos. 5, 7, 10.
19—Shriver and Sperry Cast Iron, Wood, Aluminum and Bronze Filter Presses, 12" to 42".
6—Colloid Mills, U. S. and Premier.
12—Glass Lined Tanks, to 1,000 gals.

SEND FOR LATEST CIRCULARS COVERING NINE LIQUIDATIONS!

Cash Buyers of Your Surplus Equipment—From a Single Item to a Complete Plant

BRILL Equipment Co.
183 VARICK STREET NEW YORK

Essential Oils

Aromatic Chemicals

—*Continued from page 84*

Phenylethyl Acetate. — Producers have some. Dealers hold little. Prices uniformly on firm to strong basis.

Safrol.—Next door to unobtainable in most distributive quarters.

Strolyl Acetate.—Narrow distribution of supplies. Holdings mainly small lots. Very firm position.

Terpineol.—Inquiry reasonably active. Market undertones show no unsettlement. Most dealers report stocks of moderate size at best.

Thymol.—Coaltar item moving well. Most pressing needs being supplied from production boosted since beginning of war.

Vanillin.—Drawback on alcohol expected to revive activity of extract makers. Demand for vanillin already at high volume.

— OPD : 72d Year —

LOCATED PHILADELPHIA, PA.

COMPLETE BUCKEYE OIL PRESSING UNIT

4—BUCKEYE 15 BOX HYDRAULIC OIL PRESSES, 16" RAM, 24" STROKE, 4000 NO. P.S.I.
1—BUCKEYE HYDRAULIC 4 PLUNGER HORIZ. HIGH AND LOW PRESSURE PUMP.
1—PAIR (2) BUCKEYE TANK TYPE ACCUMULATORS, HIGH AND LOW PRESSURE.
1—LOT HIGH PRESSURE PIPING WITH VALVES AND FITTINGS.
1—CAKE FORMER AND MIXER.
1—NO. 2½ EUREKA VERT. BREAKER OR CRUSHER MILL.
3—DOUBLE STAND STEEL 4 ROLLER MILLS, 7"x18", 7½"x20", AND 7½"x30" ROLLS.
1—NO. 21 BUFFALO CHOPPER.
1—SHRIVER IRON FILTER PRESS, 7"x7".
3—JOHNSON 18"x18" IRON FILTER PRESSES.
1—SHRIVER 24"x19" IRON FILTER PRESS.
1—WELDED STEEL STORAGE TANK, APPROX. 225 GALS.
1—GOULD 1½" IRON ROTARY PUMP.
1—SCHUTZ-O'NEILL 20" PULVERIZING MILL WITH COLLECTOR.
1—COPPER JACKETED KETTLE, APPROX. 175 GALS.
1—STANDARD AUTOMATIC CAPPING MACHINE.
2—NO. 000 AND NO. 1 ABBE ROTARY CUTTERS.
1—A. S. BECK CARTON PRESSER AND GLUING MACHINE.
1—SINGER BAG SEWING MACHINE, FOOT OPERATED.

WRITE FOR SPECIAL BULLETIN

STOCK SPECIALS

1—3 Roll High Side Raymond Mill.
2—5 Roll W.C. 16"x 40" Steel Roller Mills.
1—Allbright-Nell Atmos. Drum Dryer, 3'x 8'.
1—Devine 4'x 30' Rotary Vacuum Dryer.
1—Proctor Automatic Soap Chip Dryer.
6—4,000 gal. Vert. Acid Proof Tanks.
3—Sweetland Filters, Nos. 5, 7, and 8.
12—Iron and Wood Filter Presses, 18" to 36" sq.
2—Abbe Rotary Cutters, No. 000 and No. 1.
1—No. 2 Oliver Duplex Vac. Pump, 14"x 8".
1—Pennsylvania Vac. Pump, 14"x5".
2—Worthington 12"x 12"x 12" Vac. Pumps.
1—Beach-Russ No. 6 Compound Vac. Pump.
2—Day No. 30 Imperial Mixers, Jack.
2—Day No. 30 Imperial Mixers, unjack.
1—Creamery Pkge. Mfg. Co. Homogenizer, motor driven, approx. 400 gals. per hr.
1—De Laval No. 301 Multiple Clarifier, M.D.
5—Ross 8, 15 and 40 gal. Pony Mixers.
4—Ross 3 Roll Mills, 12"x 30" and 16"x 40".
10—Pebble and Jar Mills, Lab. to 750 gals.
3—Tolhurst Centrifugals, 26", 32" and 40".
10—Stone Mills, 10" to 32".
8—Lead and Paste Mixers, 50 to 135 gals.
6—Powder Mixers, 100 lbs. to 3,500 lbs.
6—Horiz. and Vert. Mixers, up to 500 gals.
18—Glass Lined and Steel Tanks up to 10,000 gals.
6—Vert. Jack. Kettles, up to 500 gals.
20—Copper Jack. Kettles, up to 150 gals.
1—Schutz-O'Neill No. 1 Sugar Pulverizer.
1—Jeffrey 24"x 18" Type A Hammer Mill.
3—Single and Double Roll Spike Crushers.
2—No. 0 and No. 1 Raymond Mills.
6—Williams & Jay Bee Hammer Mills.
1—Bauer 22" Attrition Mill.
1—Link Belt 75' Slat Conveyor.
1—Stedman 42" Ball-Bearing Disintegrator.
15—Electric Agitators, ¼ to 10 H.P.
20—Rotary, Centrifugal and Vacuum Pumps.
6—Liquid, Paste and Powder Fillers.

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WRITE FOR COMPLETE BULLETINS
WE BUY YOUR SURPLUS MACHINERY

STEIN EQUIPMENT CORPORATION
Department E
426 BROOME STREET
NEW YORK CITY

Paint Federation Discusses War Needs

—*Continued from page 7*

from Maj. Gen. Eugene Reybold, chief of the engineering division.

Camouflage Coatings

One of the most protracted and puzzling of the project discussions was on No. 2, which has to do with oleoresin-water emulsions in connection with specification T-1279. This was opened by the chairman of the committee, John C. Moore, of the Sinclair Refining Company. One problem considered was the compatibility of T-1279 with casein paint. Kenneth J. Howe, of Thibaut & Walker, reported a long series of experiments in mixing oil-in-water emulsions and water-in-oil emulsions with dry powdered casein; many variables were encountered. It was the general conclusion that:—

(1) Dilutions in the field should be limited to 1 to 1.
(2) Paints should be blended for desired colors before dilution.
(3) Base paint should be diluted 1 to 3 and then tinted.
(4) Care should be taken in selecting either water-in-oil or oil-in-water type of emulsion.

Many of the production men present had different experiences in the blending and diluting of emulsion paints. One question raised was why there should be an oil paint (1215) and an emulsion paint (1279) of the same type.

Mildewing of camouflage coatings on osnaburg was discussed by several speakers, among the points made were:—(1) mildewing occurs before a paint is dry; (2) zinc oxide is preventive; (3) emulsions require more dowicide than house paints do.

Various opinions were expressed on opacity tests for camouflage paints. Such tests, it was generally believed, should be made on cloth of the color (olive-drab) usually to be covered.

Industrial Camouflage

Panels were exhibited by Austin O. Allen, of the Vita Var Corporation, in his discussion of experiences with T-1215 in industrial camouflage. He said that the addition of zinc oxide would be an improvement, and that domestic whiting was the preferable extender. Titanium white was found better than zinc sulphide pigments. Chrome oxide was the best green.

A variety of suggestions were offered in connection with the proposed revision of specification T-1215.

Infrared Reflectance

A studious report on the photographic testing of coatings for infrared reflectance was given, with illustrative slides, by Vincent Vesce, of Harmon Color Works. The usefulness of Munsell scales was stated. A photographic lighting device was pictured and described. Photography was considered better than spectrophotometry because of the latter's narrower infrared range.

The best match for chlorophyl was said to be pigmentation that lay between an 87 and 89A Wratten filter.

Heat reflection of infrared coatings was discussed by Guido C. Henry, of E. I. du Pont de Nemours & Co. In tests with No. 1 chrome green, chrome oxide green, aluminum, and white, the following relations were found:—

Infrared reflectance.	Temperature (°F.)
10	99
20	99
30	98
40	98
50	96
60	100
70	100
White	92
Aluminum	96

Practical experience with painted gasoline tanks was reported to have shown that, taking the evaporation loss under black painting as 100, aluminum painted tanks lost 80; white tanks, 60.

Concerning Specifications

A part of the technical session was devoted to discussions of the history, current trends, and the probable future of Federal specifications, of that category, and those of the several army offices, the navy bureau of ships, and the maritime commission. Among those taking part were J. B. Howell, of the National Bureau of Standards; Paul Lotz, of the Socony Paint Products Company; Lieut. H. L. Aldrich, of the navy; G. G. Sward, of the N.P.V.L.A. scientific section, who is preparing further lists of specifications; Joseph J. Mattiello, of the Hilo Varnish Corporation, who spends at least half of his time in the army quartermaster contact office in Washington and who declared that the Q.M.C. welcomes everybody and is anxious to discuss specification problems and their solution; Francis Scofield, also of the scientific section, who told of specifications undergoing revision and the passing of many from the AXS group to regular army categories; Captain Metz, of Holabird ordnance laboratory, who brought word of a forward step in the coordinating of specifying in army offices; a captain from the engineer corps, who asked for criticisms and explained cooperation with the federation's technical advisory committee.

— OPD : 72d Year —

Paint Tests Told

John Stewart Remington has compiled a useful treatise on the testing of paint materials. He draws his data from experience in British practice, and he has put them into a handy little book.*

Rapidity is the prime object of the author in his selection of tests; he presents his collection as being of usefulness for purposes of identification, sort of preliminary to more exact quantitative analyses when such are needed.

The contents of the book are arranged under white and colored pigments, oils and thinners, synthetic resins. There are also collections of physical tests and miscellaneous data on apparatus and references. All in all the book should have a useful place in busy paint plants, especially the smaller ones, and it should present some useful hints for all paint technicians.

* Paint Laboratory Note Book, a Handy Guide to Works Practice. By John Stewart Remington. Cloth; vi+138 pages (5½ by 8½). Illustrated. Brooklyn: Chemical Publishing Company. 1942. $2.75.

— OPD : 72d Year —

Stearates Brochure Ready

Franks Chemical Products Company, manufacturer of stearates, Brooklyn, has made a reprint of its brochure, the original of which was issued last Summer. In addition to giving general information on the twelve varieties of stearate manufactured by the Franks Company, the brochure contains methods for testing, an analysis of the various stearates, and their industrial uses, as well as suggestions for potential uses. Copies of the brochure are now available at the office company, Bush Terminal, building 9, Brooklyn, N. Y., by mentioning the REPORTER.

Dyestuffs & Textile Leather Chemicals

—*Continued from page 39*

Tanning Materials

Divi-Divi.—Tight import conditions result in firm undertone. No change quotably.

Gambier.—Supplies of extract tight. Material quotably unchanged.

Hematine.—Crystal and paste quotably unchanged. Market tone unaltered.

Hemlock Bark Extract.—Quotations hold unchanged for balance of 1942.

Mangrove Bark.—Shipment of 8,424 bags just received. Factors report no South American available but quote East African, when available, at $60 per ton.

Myrobalans.—Shipments of 336,000 pounds just received.

Oakbark. — New features lacking. Prices hold unchanged for balance of 1942.

Quebracho Extract.—Shipments of 4,778,520 pounds reported just recently received.

Wattle Bark. — Shipments of 2,185 bags of bark and 6,346 bags of extract just received. Government is understood to favor imports of extract rather than bark due to short space available.

Shipping Information

All matter under this head fully protected by copyright

New York Imports

ADONIS HERBS—84 bls, 11,235 lbs, Amtorg Trading Corp
AGARIC—60 bgs, 2,699 lbs, Amtorg Trading Corp
WHITE—100 bgs, 4,644 lbs, Amtorg Trading Corp
ANISE—126 bgs, 18,900 lbs, Edmond Weil
ARROWROOT—400 bbls, Morningstar, Nicol, Inc
5,120 bgs, 1,024,000 lbs, Morningstar, Nicol, Inc
FLOUR—625 bgs, 125,000 lbs, Perkins Glue Co
833 bgs, 166,600 lbs, Java America Export Co
ASBESTOS—27,099 bgs, 5,419,800 lbs, Amtorg Trading Corp
BAUXITE—6,879 tons, Aluminum Co of Canada
BEEF EXTRACT—4 cs, Swift & Co
BONES—3,800 bgs, 760,000 lbs, Eastman Gelatine Corp
BRISTLES—502 cs, 60,946 lbs, Amtorg Trading Corp
CALCIUM CITRATE—361 bgs, 58,440 lbs, Stauffer Chemical Co
CAROA—522 bls, H W Peabody & Co
CASTOR BEANS—28,370 bgs, 4,255,500 lbs, Baker Castor Oil Co
6,794 bgs, 1,019,100 lbs, Spencer Kellogg & Sons
CHROME ORE—4,487 tons, Amtorg Trading Corp
1,001 tons, 5 cwts, E J Lavino & Co
COCOA BEANS—2,800 bgs, 560,000 lbs, A C Israel Commodity Co
6,500 bgs, 1,300,000 lbs
2,000 bgs, 400,000 lbs, Guaranty Trust Co
8,600 bgs, 1,720,000 lbs, W R Grace & Co
1,500 bgs, 300,000 lbs, Middleton & Co
1,900 bgs, 380,000 lbs, Wessel, Duval & Co
1,500 bgs, 300,000 lbs, Farr & Co
5,100 bgs, 1,020,000 lbs, Nieschlag & Co
3,000 bgs, 600,000 lbs, Loeb, Rhoades & Co
700 bgs 140,000 lbs, Kennedy, Butcher & Co
2,400 bgs, 480,000 lbs, Bankers Trust Co
1,500 bgs, 300,000 lbs, Wood & Selick
1,000 bgs, 200,000 lbs, E Adler & Co
1,800 bgs, 360,000 lbs, Willard, Hawes & Co
CORIANDER SEED—254 bgs, 22,000 lbs, Amtorg Trading Corp
FUR WASTE—186 bls, 65,175 lbs, National City Bank
83 bls, 13 tons, 16 cwts, 2 qtrs, 9 lbs, Bank of New South Wales
GUM, BENZOIN—11 cs, Edmond Weil
PENDARE—35 bls, 3,203 lbs, Wessel, Duval & Co
136 bls, 20,805 lbs, Chicle Development Co
HAIR DYE—1 cs, Bank of New South Wales
HAIR CATTLE—26 bls Brush & Weaving Corp
CATTLE TAIL—37 bls Brush & Weaving Corp
COW TAIL—2 bls, J Henry Schroeder Banking Corp
HORSE—4 cs, Philadelphia National Bank
HORSE MANE—8 bls, J Henry Schroeder Banking Corp
HORSE TAIL—3 bls, J Henry Schroeder Banking Corp
LEAD—86 bars, Bank of Asia
ORE—6,200 tons, Metal Reserve Co
SILVER—32,492 ingots, 1,014 tons, 14 cwts, 1 qtr, 19 lbs, Bank of New South Wales
LICORICE ROOT—1,116 bls, 380,556 lbs, Amtorg Trading Corp
LIME JUICE—75 hhds, 52,500 lbs, Murbas Trading Co
103 hhds, 72,100 lbs, Cross & Blackwell
MACE—10 bbls, 1,390 lbs, L & R Millan
8 cs, 2 bbls, 2,120 lbs, Davie Transportation Co
MANIOC FLOUR—318 bgs, 63,600 lbs, Java American Export Co
MEDICINAL PREPS—6 cs, Bank of Asia
MINERAL SAND—5,797 bgs, 285 tons, Metal Traders, Inc
NUTMEGS—100 bgs, 20,300 lbs, Middleton & Co
22 bgs, 4,446 lbs, Foreign Freight Construction Co
100 bgs, 20,300 lbs, Barclay Bank
30 bgs, 6,120 lbs, L & R Millan
OIL, BAY—1 cs, Yellow Express Carriers, Ltd
53 cs, 2,050 lbs, P R Dreyer
14 cs, 700 lbs, W J Bush & Co
DIESEL—45,896 bbls, 1,927,605 gls, Asiatic Petroleum Corp
FUEL—71,336 bbls, 2,996,099 gls, Standard Oil Co of N J
GERANIUM—81 cs, 10,956 lbs, Amtorg Trading Corp
EUCALYPTUS—34 dms, 6 tons, 1 cwt, 3 qtrs, 6 lbs, Orbis Product Corp
LIME, DIST—141 cs, 6,909 lbs, Middleton & Co
30 cs, 1,470 lbs, Fritzsche Bros
58 cs, 2,842 lbs, Ungerer & Co
NEROLI—11 dms, 2 tons, 4 cwts, Geo Luedere & Co
16 dms, 3 tons, 4 cwts, Irving Trust Co
ORIGANO—691 bls, 25,000 lbs, Dalton Cooper, Inc
POTASH CHLORIDE—450 tons, Amtorg Trading Corp
PYRETHRUM FLOWERS—51 bls, 10,200 lbs, S B Penick & Co
224 bls, 44,800 lbs, New York Trust Co
95 bls, 19,000 lbs, Manufacturers Trust Co
QUEBRACHO EXTRACT—20,246 bgs, 2,430,520 lbs, International Product Corp
33,668 bgs, 4,040,160 lbs, The Tannin Corp
TAPIOCA FLOUR—4,000 bgs, 800,000 lbs, Wessel, Duval & Co
WAX—58 bgs, D Steengrafe
93 bgs, Wessel, Duval & Co
CARNAUBA—56 bgs, 11,200 lbs, Smith & Nichols
84 bgs, 16,800 lbs, Bank of London South America
56 bgs, 11,200 lbs, Strahl & Pitsch
136 bgs, 27,200 lbs, Wessel, Duval & Co
112 bgs, 22,400 lbs, American Cyanamid & Chemical Co
57 bgs, 11,400 lbs, Wm M Allison & Co
WAX, OURICURY—298 bgs, 59,600 bgs, Innis, Speiden & Co
63 bgs, 12,600 lbs, Wessel, Duval & Co
63 bgs, 12,600 lbs, Strohmeyer & Arpe Co
220 bgs, 44,000 lbs, American Cyanamid & Chemical Co
56 bgs, 11,200 lbs
ZINC, CONC—4,000 tons, 5 cwts, 2 qtrs, Bank of New South Wales
ZICON SAND—2,000 bgs, 100 tons, Bank of New South Wales

— OPD : 72d Year —

Philadelphia Imports

CHROME ORE—9,500 tons, E J Lavino & Co
PYRETHRUM FLOWERS—250 tons

— OPD : 72d Year —

YOU, too, should have your imports listed here for the information of OPD readers—it costs you nothing.

Mail lists of arrivals promptly and regularly, or telephone them—REctor 2-9820.

Calif. Chromite Deposits Geologic Maps Ready

As a part of the investigation of domestic deposits of strategic minerals by the Geological Survey, United States Department of the Interior, the Fairview and Ladd chromite deposits have been examined and mapped by G. A. Rynearson of the Survey. The Fairview mine is forty-nine miles by paved and graded dirt roads from the stock pile of the Metals Reserve Company at Yreka. The Ladd mine is fifty-seven miles by similar roads from Yreka. Each of these mines produced chromite during the first world war, and fifty tons of ore was recently shipped from the Fairview mine.

The deposits were briefly described by G. A. Rynearson and C. T. Smith in Geological Survey Bulletin 922-J, published in 1940. The chromite occurs in a large sill-like mass of peridotite intruded into chlorite schists and gneissic diorite.

Photostatic copies of geologic maps of the Fairview and Ladd mines will be sent on request to anyone directly interested in the development of these mines. Application should be made to the Director, Geological Survey, Washington, D. C.

— OPD : 72d Year —

Oxygen, Acetylene Industry Advisers Named

OPD Washington Bureau

An advisory committee for the oxygen and acetylene industry has been appointed by the War Production Board. Dr. Walter G. Whitman, assistant chief of the Chemicals Branch, has been named the government presiding officer. Committee members are:

V. G. Bartram, Shawinigan Chemicals, Ltd., Shawinigan Falls, Quebec; Ralph R. Browning, Linde Air Products Company New York; P. Coyne, Stuart Oxygen Company, San Francisco; Parker B. Francis, Puritan Compressed Gas Corporation, Kansas City, Mo.; Charles J. Haines, National Cylinder Gas Company, Chicago; C. K. Rickel, Big Three Welding Equipment Company, Fort Worth, Tex.; R. B. Swope, Southern Oxygen Company, Arlington, Va.; Herman Van Fleet, Air Reduction Sales Company, New York.

— OPD : 72d Year —

Sulphate Specialties Industry Advisers Named

OPD Washington Bureau

The War Production Board announced appointment of an advisory committee for the sulphite specialties industry. Otis B. King, administrator of limitation order L-120, is the government presiding officer. Committee members are:—

P. M. Allen, Dun Sulphite Paper Company, Port Huron, Mich.; J. B. Cowie, Hollingsworth & Whitney Company, New York; Ralph Hayward, president, Kalamazoo Vegetable Parchment Company, Kalamazoo, Mich.; G. F. Henderson, Brown Company, Berlin, N. H.; H. O. Nichols, Crown Zellerback Corporation, New York; R. L. Sisson, jr., The Racquette River Paper Company, Potsdam, N. Y.; and Dwight L. Stocker, Michigan Paper Company, Plainwell, Mich.

— OPD : 72d Year —

BEW Moves Export Control Headquarters

OPD Washington Bureau

Board of Economic Warfare has moved headquarters for the Office of Export Control to temporary building U ("Tempo U"), located at Constitution avenue, between Twelfth and Fourteenth streets, N. W.

— OPD : 72d Year —

Buy War Stamps

Substitutes and Extenders

Information on the Replacement of Scarce Materials and the Eking Out of Short Supplies

Eleventh Instalment—Fully Protected by Copyright

Aluminum Paint

As a heat-reflectant or light-reflectant coating—Federal specification TT-P-101a (FWA-PRA recommendation).

For prevention of bleeding of bituminous coating—Federal specification TT-P-88 (FWA-PRA recommendation).

For metal roofs—Federal specifications TT-P-86 and TT-P-31a (FWA-PRA recommendation).

For smokestacks, boiler fronts, and the like—Federal specification TT-V-51 (FWA-PRA recommendation).

For machinery and other metal equipment—Federal specification TT-E-506a (FWA-PRA recommendation).

For interior structural steel where light-reflection is desired—Federal specification TT-P-51a or TT-E-506a over red-lead primer (FWA-PRA recommendation).

Carnauba Wax

As an extender of this wax—Aquamel.

Chlorinated Hydrocarbon Solvents

As solvents for cellulose esters and ethers—Nitroethane; nitromethane; 1-nitropropane; 2-nitropropane.

Copper Oxide

In the control of plant mildews—Salicylates, especially bismuth subsalicylate suspended with sodium dioctylsulphosuccinate, and benzyl salicylate.

Copper Salts

As fungicides — Ferric-dimethyl dithiocarbamate; phenothiazin; salicylates; tetramethylthiouram disulphide.

Gum Arabic

As a binder—Hydroresin A.

Industrial Jewels

As bearings—Drops of fused hard glass; material H (an alumina product).

Jute

In making manila paper—Wild pineapple fiber.

Litharge-Glycerin Cement

For sealing metal-pipe joints—X-pando pipe joint compound.

Nickel

In construction of corrosion-resisting equipment—Micarta (paper or cloth laminated with a phenol-formaldehyde resin).

Ozokerite

In inks—Ozowax.

Papain

As a digesting ferment, especially in the destruction of intestinal worms in animals—Mexicain (a protease from *Pileus mexicanus*).

Quinine

As an antimalarial medicine—Active principle of *Petalostigma quadriloculare;* active principle of *Pinckneya pubens;* totaquine.

Rubber

In dentures—Acrylic-resin plastics.

Shellac

In various applications—Alvarlac; cal-lac; casein; cashellac; clearlac; lignolac; perfection lac; reaction product of an aliphatic hydroxycarboxylic acid, such as trihydrostearic acid, with the resulting products of the chlorination, or other halogenation, of resinolic acid with the aid of heat; scheellac; tung oil fatty acids.

Sodium Chlorate

As an herbicide—Calcium thiocyanate.

Sulphonated Castor Oil

In various applications—Sulphonated soybean oil.

Sulphonated Oils

As emulsifiers—Turkelene.

In treating furs and leathers—Diglycol laurate S.

Sulphonated Tallow

In textile processing—Avitone A.

Tin

In the manufacture of collapsible tubes—Celluplastic (cellulose acetate plastic).

As a bearing metal—Micarta (paper or cloth laminated with a phenol-formaldehyde resin).

Tung Oil

In paints and varnishes—Isomerized linseed oil; po-yok oil.

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